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ABSTRACT

The three volume report includes (1) an executive summary; (2) a comprehensive report reviewing the literature on current faculty development needs in schools of osteopathic medicine; and (3) a volume of resource materials. The study gauges the formal organizational and programmatic factors that influence the success of faculty development programs in medical settings, and provides materials to assist in the implementation of faculty development assessment programs. The project considers issues in two broad areas: instructional skills--i.e., the training faculty members have had for the teaching role and current educational practices employed-- as well as interest level in instructional skills and educational issues identified by the faculty; and program assessment. The latter section reviews the literature of faculty development models, programs and program evaluation, surveys and assesses five model faculty development projects, and assesses sources of funding for faculty development models. Some major findings of the survey are that the majority of faculty have had no formal preparation in instructional skills and that formal preparation in instructional skills is highly valued by those who have participated in courses, workshops, or training sessions on educational issues. The resource volume consists of a bibliography in faculty development, a directory of faculty development consultants, and guidelines for securing private and federal funding. (Author/PHR)

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American Association of Colleges of
Osteopathic Medicine

FACULTY ASSESSMENT PROJECT

Volume I: EXECUTIVE SUMMARY

HRA Contract 231-77-0066 October, 1978

This report is made pursuant to contract #231-77-0066. The amount charged to the Department of Health, Education, and Welfare for the work resulting in this report (inclusive of the amounts so charged for any prior results submitted under this contract) is $100,974.00. The names of the persons, employed or retained by the contractor, with managerial or professional responsibility for such work, or for the content of the report, are as follows:
Sylvia L. Sharma, Ph.D., Project Director

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FACULTY ASSESSMENT PROJECT
FOR COLLEGES OF OSTEOPATHIC MEDICINE

AUG 17 1979

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Final Report
Covers Period of Performance
During
September 26, 1977 - October 25, 1978

VOLUME I of 3

Contract No. HRA 231-77-0066

Contractor

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of Osteopathic Medicine
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EXECUTIVE SUMMARY

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Sponsored under Contract HRA 231-77-0066
Faculty Assessment Project
American Association of Colleges of
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October, 1978

EXECUTIVE SUMMARY

Purpose

The purpose of this project is to review current faculty development needs in schools of osteopathic medicine, to gauge the formal organizational and programmatic factors which influence the success of faculty development programs in medical settings, and to provide materials to assist in the implementation of faculty development assessment programs in schools of osteopathic medicine.

Issues Considered by the Project

The issues considered by this project may be classified into two broad areas. These are:

1. Instructional Skills.

   a. The training faculty members have had for the teaching role, particularly formal background in educational practice through courses, workshops, and training sessions.

   b. Current educational practices employed, including the use of various resources such as instructional technology, educational literature, and expert advice or assistance.

   c. Levels of interest in instructional skills programs expressed by faculty, including expectation of participation in such programs.

d. A survey of current educational issues identified by faculty.

2. Program Assessment

    a. A review of the literature on faculty development models, programs, and program evaluation in medical education.

    b. A survey of five model faculty development projects at medical colleges, and an assessment of their applicability to osteopathic medical education.

    c. An assessment of sources of funding for faculty development projects.

In addition, a volume of resource materials was prepared for use in faculty development program planning. These materials consist of a bibliography in faculty development, a directory of faculty development consultants, and guidelines for securing private and federal funding.

Methodology

The methodology for this study was based on a survey of the faculty in ten participating colleges of osteopathic medicine. The total population represented in this survey is 1723 faculty members, including basic and clinical science faculty, preceptors, hospital and clinic based teachers, and administrators. A survey questionnaire was distributed to 1180 of these faculty, of which 633 usable questionnaires were returned for a response rate of 54%.

This questionnaire was designed to elicit data on the characteristics of faculty, their preparation for teaching, current educational practices, interest in instructional skills programs, and perceptions of significant issues in osteopathic medical education.

In addition, personal on-site interviews were conducted at eight of the participating colleges, using a semi-structured interview guide. Interviews were conducted with individuals representing the entire range of faculty and administration, and were designed primarily to provide data on institutional factors in faculty development programming.

Major Findings

1. The majority of faculty in osteopathic medical schools have had no formal preparation in instructional skills. No more than 1/3 report participation in any specific workshop or training session on educational issues.
2. Formal preparation in instructional skills is highly valued by those who have participated in courses, workshops, or training sessions on educational issues. Most highly valued is training in basic teaching skills such as course design, lecturing, group discussion, and clinical supervision/teaching.

3. The major variable predicting formal preparation for teaching was full-time verses part-time status. Contrary to widespread belief in the schools, full time basic science faculty were not significantly better prepared for teaching than full-time clinical science faculty, as measured by participation in courses, workshops, in training sessions on educational issues.

4. The use of traditional educational techniques, such as lecturing and small group discussions, is high. However, there is a low level of use of more innovative techniques such as programmed instruction, self-instruction, and computer-assisted instruction. Simarlarly, textbooks, handouts, and slides are used frequently, but simulations and more complex audio-visual media are used much less often.

5. In-house educational specialists appear to be highly valued and frequently consulted by those schools which have them. However, only three schools participating in this study currently have an in-house educational specialist.

6. The majority of faculty express willingness to participate in programs designed to improve their instructional skills. Levels of expected participation are highest for programs designed to improve traditional teaching skills, such as lecturing and evaluating student performance. Also of special interest are programs designed to offer constructive critiques of teaching quality through peer and student review, and self-assessment.

Conclusions, Recommendations

Faculty in the osteopathic medical schools express a need for and interest in participating in a broad range of programs designed to improve their instructional skills. Despite the fact that several of the schools in this study have on-going faculty development activities, various factors have stalled the growth of such programs in the majority of schools. Foremost among these inhibiting factors are a lack of funds for program support, and a lack of in-house educational expertise.

The broadest recommendation emerging from this study is that the colleges of osteopathic medicine, singly or in concert, explore ways and means to act upon this interest in and need for faculty development. Efforts should be made to coordinate such activities, within any college and among colleges, to insure the most efficient use of available resources and to achieve integrated, well designed programs to meet the special and general needs of individual faculty members, departments, and colleges. The Comprehensive Report has been prepared to assist in this task, but it is recommended that each college conduct surveys of its faculty to determine the most beneficial programs for its needs.

Faculty development programs should be integrated with other programs concerned with professional growth and institutional planning. To meet this requirement, faculty development programs must have the strong support of the college administration, from budgets to staffing. An in-house educational specialist with expertise in medical education is the minimum requirement for successful program planning, conduct, and evaluation.

The model faculty development programs studied offer a wide range of suggestions for program design and content. It is recommended that these and other models be examined in detail by the appropriate administrative office, educational specialist, or faculty committee. The colleges of osteopathic medicine have an opportunity to draw upon the most successful experiences of these models.

Although the needs of each college may differ, the Project recommends that faculty development programs begin by addressing the traditional, basic instructional skills of faculty, including lecturing, evaluation, and course design. A workshop format appears to be the most successful for introducing such topics. Part-time faculty should be included in any such programs. Special programs for hospital-based faculty would be beneficial.

Efficient use of currently available resources is encouraged. Faculty and staff should become familiar with educational resources within the college. Nearby educational institutions may be a convenient source of expert advice and technical assistance. Educational resources available through various support organizations should be explored. Cooperative arrangements for the sharing of resources among the colleges should be established.

Finally, it is recommended that faculty development initiatives within the colleges be supported by the continued committment of the Health Resources Administration to the Health Manpower Act and to the maintenance of instructional excellence in medical education.

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American Association of Colleges of
Osteopathic Medicine

FACULTY ASSESSMENT PROJECT

Volume II: THE COMPREHENSIVE REPORT

HRA Contract 231-77-0066 October, 1978

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Sylvia L. Sharma, Ph.D., Project Director

FACULTY ASSESSMENT PROJECT
FOR COLLEGES OF OSTEOPATHIC MEDICINE

AUG 17 1979

Final Report

Covers Period of Performance
During
September 26, 1977 - October 25, 1978

VOLUME II of 3

Contract No. HRA 231-77-0066

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Faculty Assessment Project
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October, 1978

FOREWORD

This report is the first known effort to investigate and describe the needs of osteopathic medical faculty. As such, the report provides a resource of significant value to the osteopathic profession, the colleges, federal agencies and the educational community at large.

The project staff were assisted by an Advisory Committee composed of educators from the colleges of osteopathic medicine and chaired by Dr. Robert Kistner, Vice President and Dean, Chicago College of Osteopathic Medicine.

The American Association of Colleges of Osteopathic Medicine was fortune to obtain the professional services of Sylvia L. Sharma, Ph.D., as Project Director, and Donald Pollock, doctoral candidate, University of Rochester, Rochester, New York, as the project research assistant. Mr. Francisco Ortiz served the project in a similar capacity in its formative days.

The Faculty Assessment Project was an initial effort to investigate faculty needs and has produced preliminary findings to assist the colleges to enhance the wide range of professional and teaching capabilities of their faculties. The AACOM is proud to have been given the opportunity to serve the public and the osteopathic colleges through the project and respectfully acknowledges the cooperation and support of all those who made this study possible.

Anthony J. McNevin
Executive Director
American Association of Colleges of Osteopathic Medicine

VOLUME II: TABLE OF CONTENTS

Page

FORWARD ii

TABLES. v

PREFACE vi

ABSTRACT. vii

I. INTRODUCTION. 1

Purpose 3
Scope of Work 3
Methodology 5
Population. 10
Limitations 11
Summary 14

II. NEEDS ASSESSMENT SURVEY: BACKGROUND CHARACTERISTICS. . . 15

Age 15
Sex 16
Disciplinary Area 18
Rank and Administration 20
Position. 23
Degrees 24
Speciality and Certification. 24
Teaching Load 26
Professional Life 27

III. PREPARATION FOR TEACHING. 29

IV. CURRENT EDUCATIONAL PRACTICE. 36

Instructional Settings. 36
Use of Journals 37
Use of Resources in Education/Teaching. 40
Sources of Advice and Assistance. 43

V. INTEREST IN INSTRUCTIONAL SKILLS PROGRAMS 47

VI. ISSUES IN FACULTY DEVELOPMENT 58

Model Programs. 58
Issues in Model Programs. 60
Applicability of Model Programs to Osteopathic Medical Colleges. 68

Table of Contents - continued

Page

VII. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 74

Background Characteristics. 74
Preparation for Teaching. 75
Current Educational Practice. 77
Interest in Instructional Skills Programs 79
Issues in Faculty Development 80
Recommendations 81

APPENDICES. 86

A. Faculty Survey Questionnaire. 87
B. Supplementary Data Tables 95
C. Letters from Deans to Faculty 114
D. Letter from Dean to Director of Medical Education . . 124
E. Follow-up Letter from American Association of Colleges of Osteopathic Medicine 125
F. Transmittal from Project Liaisons 126
G. Transmittal Sheet for Directors of Medical Education. 127

TABLES

Page

TABLE 1: SAMPLE AND RESPONSE RATE 12
2: RETURN RATE BY COLLEGE 12
3: AGE. 15
4: SEX. 17
5: SEX AND ACADEMIC RANK. 18
6: DISCIPLINARY AREA. 19
7: RANK 21
8: RANK AND HIGHEST DEGREE. 22
9: ADMINISTRATORS 23
10: POSITION 23
11: DEGREES. 24
12: SPECIALTY AND CERTIFICATION. 25
13: TEACHING LOAD. 26
14: PROFESSIONAL LIFE. 27
15: PREPARATION FOR TEACHING: FORMAL COURSES. 30
16: PREPARATION FOR TEACHING: WORKSHOP/TRAINING SESSION 30
17: PREPARATION FOR TEACHING: COURSES AND WORKSHOPS FOR BASIC AND CLINICAL SCIENCE TEACHERS 32
18: CLINICAL SCIENCE FACULTY PREPARATION FOR TEACHING. . 33
19: SOURCES CONTRIBUTING TO TEACHING 34
20: INSTRUCTIONAL SETTINGS 37
21: USE OF EDUCATIONAL JOURNALS. 38
22: USE OF PROFESSIONAL JOURNALS 40
23: USE OF EDUCATIONAL RESOURCES 42
24: USE OF INSTRUCTIONAL METHODS 43
25: SOURCES OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS 44
26: EDUCATIONAL SPECIALIST AS A SOURCE OF ADVICE/ ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS BY COLLEGE 45
27: INTEREST IN PARTICIPATING IN PROGRAMS. 48
28: PROGRAM PARTICIPATION: DISCIPLINARY AREA AND INSTRUCTIONAL SETTING 49
29: INTEREST IN RECEIVING HELP ON COMPONENTS OF INSTRUCTION. 51
30: CONVENIENCE OF PROGRAM FORMATS 54
31: PREFERRED PROGRAM SCHEDULES. 55
32: C.M.E. CREDIT FOR INSTRUCTIONAL ISSUED ACTIVITIES. . 56

PREFACE

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West Virginia School of osteopathic Medicine

ABSTRACT

This report presents the results of a study of faculty development needs in colleges of osteopathic medicine. The project was concerned to survey faculty perceptions of their needs and interests, to identify the organizational and programmatic factors influencing the success of faculty development programs in medical settings, and to provide materials to assist in the implementation of faculty development programs in schools of osteopathic medicine.

The project utilized a questionnaire survey of faculty in ten colleges of osteopathic medicine and personal interviews at eight colleges.

The majority of faculty in the osteopathic medical schools have had no formal training for the teaching role. No more than one-third have participated in workshops or training sessions designed to improve their instructional skills. Nonetheless, a broad majority of faculty expressed interest in and a need for programs addressing a wide range of topics in education/teaching. Foremost among these are programs in basic skills: lecturing; discussion; evaluation; course design; and clinical supervision. These are the skills most commonly used by faculty in the D.O. schools.

The project recommends the establishment of carefully planned faculty development programs in the colleges of osteopathic medicine. The project major recommendations focus on improving accessibility to such programs and educational resources. These include programs for off-campus faculty, in-house educational specialists, and familiarity with currently available resources.

The final volume of this report offers resources to assist in faculty development programming: an annotated bibliography of the literature; a directory of faculty development consultants; and guidelines for securing private and federal funding for faculty development.

INTRODUCTION

The osteopathic medical profession is in a period of growth brought about by an increase in the number of osteopathic medical colleges and a growing acceptance of osteopathic medical physician services by the general public. Over the last ten years, the number of osteopathic medical colleges has increased from five to twelve, and two other colleges were recently awarded provisional accreditation status. The development of these new colleges has resulted in significantly larger student enrollments, increased liaison between the colleges and clinical training facilities, and profound demands upon the limited resources of the osteopathic medical colleges and their affiliated hospitals.

For the profession to continue its excellence in the training of primary care physicians, the immediate imperative becomes one of strengthening the primary resource of the osteopathic medical colleges -- the teaching faculty. Most of the newly established, publicly supported osteopathic medical colleges have either created administrative positions or have institutional plans for faculty instructional support programs. The remaining five private osteopathic medical colleges have also taken an interest in the improvement of faculty instructional skills.

This project is intended to provide baseline information about faculty instructional issues. This hopefully will assist osteopathic medical colleges presently engaged in faculty instructional skills activities as well as those osteopathic medical colleges interested in initiating a faculty support effort.

Indirectly, this project will assist the profession and its osteopathic teaching hospitals. In turn, the data obtained from this project are to assist the Bureau of Health Manpower to design strategy to assist in the education of primary care physicians.

This project comes at a propitious point in time in terms of recent research and other assessment studies in faculty development. At the institutional level, John Centra, in Faculty Development Practices in U.S. Colleges and Universities, 1976, surveyed faculty development programs in higher education, not including allopathic or osteopathic medical colleges. He found that institution size was the single most important factor influencing faculty development programing at two year public/private colleges and four year public/private colleges and universities.

More specifically, Sturwold completed a survey of the following health related institutions: Medicine, Dentistry, Nursing, Osteopathic Medicine, Vet. Medicine, Pharmacy, Optometry, and Dental Hygiene, in 1977 on instructional technology as reported in Instructional Technology in the Health Sciences. She found that 22 percent had devoted $10,000 of their budget to instruction technology. Instructional technology was broadly defined in her study to include the management of ideas, machines, and people in the educational process. Ten osteopathic medical colleges participated in her study. However, Sturwold was unable to report results on the survey questionnaire item on faculty education and training in instructional technology for the MODVOP schools because the participating institutions failed to answer the survey item. Thompson et. al., in the Osteopathic Medical Manpower (OMMI) Project, 1977, surveyed components of osteopathic medical education and recommended a further study on osteopathic medical teaching faculty.

At the faculty member level, Jason et al. completed a survey of allopathic medical faculty in 1977 on faculty development issues, funded by the Kellogg Foundation and the Bureau of Health Manpower.[1] Also, Bland reported results of an assessment survey of members of The Society of Teachers of Family Medicine in Family Medicine Times, January,1978, which included a few osteopathic physicians. In examining the recent research at both the institutional and individual faculty levels, this study of osteopathic medical faculty will provide additional information heretofore not available on the needs of osteoapthic medical faculty and will identify the needs of their respective colleges as the faculty report them. This project was supported entirely through a Bureau of Health Manpower DHEW contract.[2]

Purpose

The purpose of this project is to review current faculty development needs in schools of osteopathic medicine, to gauge the formal organizational and programmatic factors which influence the success of faculty development programs in medical settings, and to provide plans for and assistance in the implementation of faculty development assessment programs in schools of osteopathic medicine.

Scope of Work

This research consisted of three basic components, in each of which specific issues may be outlined. These are (Article 1, Contract No. 231-77-0066):

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[1] Jason, Hilliard, et al. Faculty Development Survey. DHEW, Bureau of Health Manpower Contract No. 231-76-0011, December, 1977.

[2] The legislative authorization for this contract is P.L. 94-484, Section 786 (a) (3), which was intended to improve instruction in primary care.

I. Needs Assessment

1. To determine the training faculty members have had in instruction for primary care practice.

2. To assess the perceptions of faculty members on current issues in osteopathic education, including the identification of areas where faculty would entertain educational interaction to improve their skills or to help them overcome problems they have identified.

3. To ascertain the structural and organizational differences among the various schools of osteopathic medicine which would influence the establishment of faculty development programs.

II. Faculty Development Program Assessment

1. To review existing literature on faculty development models, processes, and program evaluations used in medical education settings.

2. To survey five model faculty development projects at medical colleges, and assess their applicability to osteopathic medical education.

3. To locate and provide procedures for the assessment of sources of funding for conducting faculty development projects.

III. Materials Development

1. To prepare a preliminary report on findings resulting from the completion of tasks outlined in Section I and II.

2. To prepare guidance materials which can be used by the schools of osteopathic medicine as they engage in faculty development programs.

Methodology

Needs Assessment: Faculty Survey

The basic methodology of the Needs Assessment component of this project consisted in the use of a forced-choice questionnaire designed to solicit (1) background information, (2) data on preparation for primary care instruction, (3) current educational practices, (4) expected levels of participation in various instructional skills programs, and (5) further comments. Computer analysis of these questionnaires was performed to develop relevant statistical information on the issues identified.

The survey questionnaire was developed through the following procedures. First, a review of the literature identified several existing faculty assessment instruments which were examined for compatibility with the Project's focus on instructional issues. These were: (1) the Faculty Survey Questionnaire, 1976 and 1977, by Dr. Jerry Gaff, Director, Project for Institutional Renewal, Washington, D.C.; (2) the survey items in A Handbook for Faculty Development, Vol. I, 1975, by Dr. William Bergquist; and (3) the Faculty Survey, Faculty Development Division, Association of American Medical Colleges, 1977. Second, advice was sought from many faculty development experts. Individual consultations were held with Gaff, Dr. Hilliard Jason, Director, Faculty Development Division, AAMC, and Division staff Drs. Dale LeFever, Henry Slotnick, and Mr. Luis Patino. The Project's Advisory Committee, appointed by the American Association of Colleges of Osteopathic Medicine's Board of Governors and Council of Deans, reviewed drafts of the survey questionnaire, and provided useful feedback. Ultimately, components of the questionnaire were designed to be compatible with the survey instrument developed by AAMC. These components were pretested by AAMC in several workshops prior to the distribution of their questionnaire.[1] Dr. Henry Slotnick, currently Director of the Office of Medical Education, University of North Dakota School of Medicine, was contracted to (1) review the computer applicability of the survey instrument, (2) refine the syntax of the survey items, and (3) prepare statistical information. Final approval of the osteopathic medical survey questionnaire was received from the Bureau of Health Manpower.

Feedback on the results of the Faculty Needs Assessment Survey was obtained from selected representatives of the participating osteopathic medical colleges at a Round Table Meeting, Philadelphia College of Osteopathic Medicine, August, 1978, and has been integrated into this volume.

Faculty Survey Instrument Outline

The Faculty Survey Questionnaire was based on the following outline:

Section I. Background Information

1. Demographic Characteristics
2. Degrees, Where Obtained, Dates of Graduation
3. Career Line
4. Number of Years Teaching Osteopathic Medical Schools
5. Current Academic Position
6. Current Level of Teaching Responsibilities

Section II. Preparation for Teaching

1. Formal Courses in Education
2. Ad-hoc Workshop or Training Sessions; Level of Participation
3. Continuing Medical Education Credits

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[1] Copyright authorization granted by Dr. John Cooper, Executive Director, Association of American Medical Colleges.

4. Sources that Contributed to Teaching
5. Further Comments

Section III. Current Educational Practice

1. Reading of Identified Journals
2. Use of Educational Resources
3. Use of Instructional Methods
4. Reliance Upon Sources for Advice/Assistance

Section IV. Program Participation

1. Programs
2. Formats
3. Scheduling
4. Level of Interest in Receiving Help in Identified Components of Instruction

Section V. Further Comments

1. Kind of Institutional Support to Improve Teaching
2. Institutional Constraints in Implementing a Faculty Support Program
3. Current Issues in Osteopathic Medical Education
4. Topics for Future Research

The Faculty Survey Questionnaire is included in this report as Appendix A.

Needs Assessment: Institutional Visits

In addition to the survey instruments, the Needs Assessment Component of this project include on-site visits to eight of the participating osteopathic medical colleges. Interviews were conducted in a combination of round table and personal interview formats. These focused on issues related to faculty program needs and the institutional framework in which such support programs could function. These sessions were held with basic science faculty, clinical science faculty, preceptors, directors of medical education, and chief administrators with responsibility for educational issues and concerns.

Institutional Visit Research Questions

Information regarding the structural and intra-organizational factors which would impact on the establishment of faculty development programs was obtained from the following questions:

1. Is there a history to faculty development initiatives at this campus?
2. What are the structural and intra-organizational factors impacting on faculty development at this campus for full-time faculty?
3. How can the structural factors be alleviated or their impact lessened to initiate a faculty development program at this campus?
4. What are the recommendations of the effective administrative location of faculty development effort?
5. What are the recommendations about the development of resource and guidance materials in faculty development for use by the College?

Model Program Assessment

The Faculty Development Model Program Assessment component of this project is based on the on-site interviews with selected faculty and administrators at five model faculty development programs in medical settings. The procedures for identifying these programs include (1) a review of the literature to identify faculty development educators and their respective programs in medical settings, (2) participation at the Annual Meeting of the

AAMC, Washington, D.C., November, 1977, and (3) discussions with faculty development specialists.

Based on these background activities, the on-site visits to faculty development programs were conducted at the following medical institutions:

1. College of Medicine, George Washington University, Washington, D.C.
2. School of Medicine, University of Maryland, Baltimore, Maryland
3. College of Medicine, Wayne State University, Detroit, Michigan
4. College of Human Medicine, Michigan State University, East Lansing, Michigan and the Southwestern Michigan Area Health Education Center, Kalamazoo, Michigan
5. Medical College of Virginia, Virginia Commonwealth University, Richmond, Virginia

The model program data are discussed in CHAPTER VI: ISSUES IN FACULTY DEVELOPMENT.

Model Program Research Questions

1. What is the history of faculty development initiatives at this campus?
2. What are the structural and intra-organizational factors impacting on faculty development at this campus for full-time faculty? Part-time clinical faculty? Hospital-based clinical faculty?
3. How can the structural factors or their impact be lessened to initiate a faculty development program at a campus?
4. How are funding sources identified?
5. What is the minimum structure of an effective faculty development program?

6. How is the effective administrative location of a faculty development program/or component determined?
7. What are staff recommendations toward developing resource materials?

Materials Development

Literature reviews and the assessment of sources of funding were conducted and are contained in VOLUME III: SELECTED FACULTY DEVELOPMENT RESOURCES AND GUIDANCE MATERIALS FOR COLLEGES OF OSTEOPATHIC MEDICINE. These materials were prepared based on the Project's focus on instructional program development and discussions with faculty and administrators at the participating osteopathic medical colleges. Initial drafts of the resource materials were prepared for review by members of the colleges at a Round Table Meeting, Philadelphia College of Osteopathic Medicine. Follow-up meetings were held with selected college representatives about these materials.

Population

The research population consisted of the osteopathic medical faculty at the following institutions:

1. Chicago College of Osteopathic Medicine
2. College of Osteopathic Medicine and Surgery
3. Kirksville College of Osteopathic Medicine
4. Ohio University College of Osteopathic Medicne
5. Oklahoma College of Osteopathic Medicine and Surgery
6. Philadelphia College of Osteopathic Medicine
7. Texas College of Osteopathic Medicine
8. New Jersey School of Osteopathic Medicine
9. New York College of Osteopathic Medicine

10. West Virginia School of Osteopathic Medicine

The osteopathic medical faculty were comprised of:

1. Full-Time and Part-Time Basic Science Faculty
2. Full-Time and Part-Time Clinical Science Faculty Including those in Adjunct Appointment Arrangements
3. Physicians Teaching in the Preceptorship Programs
4. Clinicians Teaching in the Clinical Clerkship Program
5. Chief Administrative Officers and Department Chairmen of the Colleges/Schools

Limitations

This one-year descriptive study examines osteopathic medical school faculty teaching in the undergraduate programs at ten colleges of osteopathic medicine. Two osteopathic medical schools did not participate in this study, and therefore the results presented in this Final Report may not be generalizable to the entire population of osteopathic medical school faculty. However, the Project finds no compelling evidence to suggest that faculty in the two non-participating schools are significantly different from the respondents in this survey, along the majority of important dimensions.[1]

TABLE I: SAMPLE AND RESPONSE RATE, presents estimates of the total faculty population in the ten osteopathic medical schools surveyed, the number of questionnaires distributed to all participating colleges, and the number returned. Differences in the distribution and population figures were due to certain difficulties encountered in the distribution of the questionnaries mainly to adjunct clinical faculty. These problems include the

occasional reluctance of the colleges to distribute questionnaires to physicians engaged in teaching in the clerkship curriculum, and to difficulties in identifying associated preceptors.

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[1] Two additional colleges with provisional accreditation from the AOA do not yet have teaching faculty, and were therefore not included in the survey.

TABLE 1: SAMPLE AND RESPONSE RATE

Population*	1723
Distributed*	1180
Returned	633

Return Rate = 54% of Distributed Questionnaires
= 37% of Population

* As reported by colleges

TABLE 2: RETURN RATE BY COLLEGE, presents return rates for each college.

TABLE 2: RETURN RATE BY COLLEGE

(1) College No.	(2) Population	(3) Distributed	(4) Returned	% Population (Col. 2/Col.4 x 100)	% Distributed (Col.3/Col.4 x 100)
1	185	183	99	54%	54%
2	285	150	60	21%	40%
3	173	148	82	47%	55%
4	25	15	13	52%	87%
5	98	97	58	59%	60%
6	35	23	23	66%	100%
7	200	35	30	15%	86%
8	300	252	128	43%	51%
9	175	85	64	37%	75%
10	247	192	76	31%	40%
TOTALS	1723	1180	633	37%	54%

Although the overall 54 percent return rate is adequate for drawing conclusions at an acceptable level of confidence, it can be seen that individual college return rates may be as low as 40 percent. Thus, two cautions are necessary in interpreting the data presented from the survey, First, figures for the total sample may not be a perfect representation of the entire osteopathic medical school faculty. However, the Project finds that such claims can be made with some degree of certainty. Second, conclusions drawn from the total sample my not necessarily be valid for any given college.[1]

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[1] Except where noted otherwise, all figures presented in Tables are percents of the total sample (N=633).

SUMMARY

This chapter described the needs and purposes of this DHEW funded contract, its scope of work, methodology, population, and its limitations. Chapter II reports on the background characteristics of the survey population for the following categories: age, sex, disciplinary area, rank and administration, position, degrees, specialty and certification, teaching load, and professional life. Chapter III: PREPARATION FOR TEACHING, describes formal and informal instructional activities undertaken by the population surveyed. Chapter IV: CURRENT EDUCATIONAL PRACTICE, reports on instructional settings, use of journals, use of resources in education/teaching, and sources of advice and assistance. In Chapter V: INTEREST IN INSTRUCTIONAL SKILLS PROGRAMS, are identified those types of activities in which faculty would participate. Chapter VI: ISSUES IN FACULTY DEVELOPMENT, includes a summary of data from the model program on-site visits. Finally, Chapter VII: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS, provides a final statement on the results of this study.

II. NEEDS ASSESSMENT SURVEY: BACKGROUND CHARACTERISTICS

This section presents descriptive information on the respondents in the Needs Assessment Survey. These data were collected with two considerations in mind. First, certain variables, such as the number of years teaching osteopathic medical school students, disciplinary area, and full- or part-time status, were felt to be critical for the development of instructional skills, and could be used as a guide in the planning of future faculty development strategies. Second, it is hoped that the picture of the Needs Assessment Survey respondents which emerges also will serve as a reasonably accurate representation of osteopathic medical schools' faculty as a whole. The Supplementary Data Tables in Appendix B, which provide cross-tabs of background characteristics by questionnaire item, should be used in conjunction with this section to provide detailed data on the characteristics of the survey sample.

Age

TABLE 3: AGE, shows the percentage of the total sample in each age category indicated.

TABLE 3

AGE

30 or Under	31-35	36-40	41-45	46-50	51-55	56-60	61+	No Response
4%	24%	16%	13%	11%	12%	9%	8%	2%

MEAN AGE = 42.3 years

MEDIAN AGE = 40.5 years

As may be expected, age was found to be related to variables such as academic rank, number of years teaching, and certification, such that older faculty members tend to be full professors, to have taught longer, and to be certified in a specialty area, more often than their younger colleagues, (see Appendix B : Supplementary Data Tables).

It is interesting to note, however, that the age group of 41-55 years has at least one characteristic which might not have been predicted. It was found that 44% of the respondents in this category indicated that they have an administrative title or role, compared to 38% in the 56+ category, and 23% in the under-40 group. Discussion of this fact with the Project Advisory Committee, and in on-site interviews at the colleges, revealed that in many cases these 41-55-year-old faculty members are being "groomed" for administrative roles, and are seen as a source of future leadership in the colleges.

Finally, it was found that older faculty tend to have D.O. degrees, and to teach a clinical science, more often than younger faculty members (see Appendix B : Supplementary Data Tables). A number of hypotheses might account for this difference, including a higher attrition rate of Ph.D.'s, or a recent increase in the number of young Ph.D. science teachers hired by the schools. The survey did not explore this question, but on-site interviews suggest that a combination of these factors has produced a relatively greater number of Ph.D.'s in the younger age groups.

Sex

As shown in TABLE 4: SEX, 90% of the survey sample are men, and 9% are women (1% did not respond to this question).

TABLE 4

SEX

Male	90%
Female	9%
No Response	1%

The survey findings indicate that women tend to have a Ph.D. degree (53%) and teach a basic science (54%) more often than men (20% Ph.D.'s; 23% basic science); conversely, the great majority of men have a D.O. degree (70%). Differences between men and women, in terms of other survey variables such as preparation for teaching, certification, and teaching sites, appear to be related to this Ph.D./D.O. distinction, and do not appear to relate to sex.

It is worth noting that within the last 21 years, an average of 3% of the D.O. graduates have been women.[1] However, among the osteopathic medical schools participating in this survey, women represent 5% of the D.O.'s in the sample. Although this difference is small, it raises the possibility that slightly more women D.O.'s, relative to men D.O.'s, have been hired by the colleges as faculty.

The survey findings also suggest, but do not prove, that women in the D.O. schools have opportunities for advancement which are approximately equal to those of men. Using academic rank as a measure of success in the faculty role, it can be seen in TABLE 5: SEX AND ACADEMIC RANK that the percentages of women who hold full professor rank is equal to that of men. This perception must be qualified by the fact that 78% of the women in the sample are full-time faculty, a position which may afford them greater opportunities to attain the full professor rank.

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[1] Thompson, Robert, et al. Osteopathic Medical Manpower Information (OMMI) Project: Final Report. American Association of Colleges of Osteopathic Medicine, 1977: p. 30.

TABLE 5

SEX AND ACADEMIC RANK

Rank		Sex: Male	Sex: Female
	N =	569	59
Adjunct faculty		4%	2%
Professor		19%	19%
Assoc. Professor		21%	25%
Assist. Professor		31%	39%
Instructor		9%	12%
Lecturer		5%	3%
Not Applicable		6%	0%
Other		5%	0%

Disciplinary Area

The percentages of respondents identifying themselves as basic science, clinical science, or other disciplinary area faculty are shown in TABLE 6: DISCIPLINARY AREA. (Virtually all pathologists in the survey labelled themselves clinical science teachers, despite the fact that pathology may be integrated into basic science courses at any given school.)

The disciplinary area in which respondents teach appears to be an important factor determining other characteristics. Thus, less than half of the clinical science teachers (40%) are full-time, while 89% of basic science teachers are full-time. Basic science teachers tend to be relatively new, 74% having taught in an osteopathic medical school for five years or less, and are younger than their clinical colleagues, with 55% being 40 years old or less (see Appendix B: Suplementary Data Tables). In addition, basic science teachers are more formally prepared for teaching, as measured by education courses taken, a finding which will be discussed in Chapter III: PREPARATION FOR TEACHING.

TABLE 6

DISCIPLINARY AREA

Basic Science	29%*
Clinical Science	69%
Other	2% **

* Includes faculty teaching in Behavioral Sciences

** Includes non-teaching Deans and other administrators

It is not surprising to find that few basic science teachers were engaged in private practice before coming to their college (2% in a single practice, 3% in a group practice). On the other hand, the survey found that 44% of clinical science teachers were in a single private practice, and 22% were in a group practice, before joining their current faculty. The survey found that only 24% of clinical science faculty were engaged in "study" prior to their faculty appointments, "study" having been defined as including internships and residences.

It thus appears that the majority of clinical science faculty have some private practice experience, and do not enter the teaching profession directly after completing their education. Interviews at the colleges revealed that many clinical faculty begin teaching in a college after considerable private practice experience, and with perhaps little or no direct contact with academic medicine since the completion of their D.O. degree. A few of these faculty stated in personal interviews that teaching offered an opportunity for sharing clinical experience and a departure from the demands of a heavy private practice. In addition, at least one school has a policy of requiring at least five years of clinical experience prior to an academic appointment. Whatever its impact on instructional skills, this base of clinical experience was valued in the colleges.

In contrast, 31% of basic science teachers reported being engaged in "study", which may be interpreted as graduate or post-graduate education for Ph.D.'s, and 69% were in teaching and/or research prior to their osteopathic medical school appointments. Thus, although basic science teachers may have fewer opportunities to gain practical experience which would be equivalent to a physician's clinical practice, basic science teachers may have more teaching experience than clinicians, prior to coming to their osteopathic medical school.

Rank and Administration

TABLE 7: RANK, presents the percentages of respondents who indicated that they hold the academic ranks listed. The rank of Adjunct Faculty member was a title granted by some colleges primarily to clinicians teaching in an associated hospital or college-based clinic, though some respondents without an "official" title may have used this category to describe their position vis-a-vis the college.

It should be noted that schools may differ on the criteria for and significance of academic rank. For example, some schools grant professorial status to clinicians in affiliated hospitals, while other schools do not.

Therefore, any academic rank category may not be homogeneous with respect to any specific characteristic.

TABLE 7

RANK

Adjunct Faculty	5%
Professor	19%
Associate Professor	22%
Assistant Professor	32%
Instructor	10%
Lecturer	5%
Not Applicable	5%
No Response	2%

The distribution of academic ranks follows the expected pattern, with a relatively greater number of assistant professors, and fewer full professors. Likewise, 46% of the full professors have been teaching in an osteopathic medical school for 12 or more years, versus only 8% of assistant professors.

The survey findings underscore the need for faculty development planning to consider other aspects of the teaching role in addition to instructional skills. For example, 72% of the full professors in the sample have some administrative title or role; at least 20% of the assistant professors also have some administrative function (see Appendix B: Supplementary Data Tables). Although this survey focuses on instructional skills issues, these other faculty roles, such as administration and research, should not be ignored in faculty enrichment programs.

The percentages of respondents in selected faculty ranks who have various degrees is shown in TABLE 8: RANK AND HIGHEST DEGREE.

TABLE 8

RANK AND HIGHEST DEGREE

Highest Degree	Full Prof.	Assoc. Prof.	Asst. Prof.	Instructor	Other
BA/BS	0%	0%	1%	2%	1%
MA/MS	0%	1%	0%	5%	1%
Ph.D.	30%	27%	34%	7%	1%
D.O.	64%	64%	59%	80%	79%
M.D.	2%	3%	2%	0%	7%
Other	4%	5%	4%	6%	9%

This table indicates that there is a fairly consistent proportion of faculty in the professorial ranks holding Ph.D. versus D.O. degrees. This proportion is roughly equal to the percentages of Ph.D.'s and D.O.'s in the entire sample (see TABLE 11: DEGREES), although slightly more Ph.D.'s hold professorial rank than D.O.'s. Assistant professors are more likely to have a Ph.D. than are full professors; conversely, full professors are more likely to have a D.O. degree than are assistant professors (chi^2 = 6.1747, with 2 degrees of freedom).

A total of 34% of the respondents in the survey indicated that they hold an administrative position (see TABLE 9: ADMINISTRATORS). This category includes Deans, Department Chairmen, and other positions within colleges and hospitals, judged to be administrative in nature. The figure of 34% may be high, perhaps due to respondent tendency to elevate a normal faculty administrative role to a "position".

TABLE 9

ADMINISTRATORS

Administration	34%
Not Administration	47%
D.M.E.	4%
No Response	15%

Position

Respondents were asked to identify themselves as full-time with or without additional practice income, part-time salaried, or unpaid volunteer, as shown in TABLE 10: POSITION.

TABLE 10

POSITION

Full-time College, with no practice income	40%
Full-time College, with practice income	12%
Part-time College, salaried	17%
Unpaid Volunteer	30%

The difference in the percentage of those full-time faculty with and without additional practice income must be qualified. It was noted during on-site interviews at the colleges that schools in two states do not allow full-time faculty to earn additional income from a clinical practice. While this factor may limit the income earned by these faculty, it may not limit the amount of time they spend in a clinical practice within, for example, a college-based clinic. Thus it must be kept in mind that some of the respondents without additional practice income have clinical responsibilities not unlike those who earn additional practice income.

Degrees

TABLE 11: DEGREES, shows the percentages of respondents holding various academic degrees.

TABLE 11

DEGREES

A: HIGHEST DEGREE

BA/BS	MA/MS	Ph.D.	D.O.	M.D.	Other
1%	1%	24%	67%	3%	5%

B: COMBINED DEGREES

Ph.D. + D.O.	Ph.D. + M.D.	D.O. + M.D.
.6%	.5%	.7%
(N=4)	(N=3)	(N=5)

It was noted earlier that 95% of those holding a D.O. degree are men; 75% of those faculty holding a Ph.D. are men. These figures are consistent with the fact that 53% of the sample's women respondents hold a Ph.D.

Specialty and Certification

The colleges of osteopathic medicine have long prided themselves on the fact that a high percentage of their graduates enter family/general practice or a primary care specialty. Consistent with this educational focus, the survey data show that the majority of physician faculty (61.4%) are in the primary care areas of general practice, internal medicine, obstetrics and gynecology, and pediatrics. It may also be noted that 73% of the clinical science faculty in the survey indicated that they are certified or are eligible for certification in a specialty area (see Appendix B: Supplementary Data Tables).

TABLE 12

SPECIALTY AND CERTIFICATION

Osteopathic Specialty	Board Certified	Board Eligible	Not Certified	Speciality Total
Anesthesiology	3.4%	.5%	--	3.9%
Dermatology	.7%	.2%	--	.9%
General Practice	15.5%	3.4%	16.5%	35.4%
Internal Medicine	12.5%	2.2%	.2%	14.9%
Neurology and Psychiatry	3.9%	1.4%	.2%	5.5%
Obstetrics and Gynecology	3.4%	1.4%	.2%	5.0%
Ophthalmology and EEN&T	2.2%	.2%	.2%	2.6%
Pathology	3.2%	.2%	--	3.4%
Pediatrics	4.2%	1.7%	.2%	6.1%
Proctology	.5%	.2%	.2%	.9%
Radiology	3.2%	.5%	--	3.7%
Rehabilitation Medicine	1.7%	--	--	1.7%
Surgery	6.8%	1.7%	--	8.5%
Others:				
Emergency Medicine	--	.5%	1.0%	1.5%
Preventive Medicine (M.D.)	--	1.0%	--	[illegible].0%

TABLE 12 is based on data from 406 D.O.'s and M.D.'s, the number indicating a specialty in the Needs Assessment Survey. There were 38 physicians who did not list a specialty.

Teaching Load

TABLE 13: TEACHING LOAD, provides information on the number of hours per week and weeks per year faculty members teach in the osteopathic medical schools.

TABLE 13

TEACHING LOAD

A: Hours per week teaching D.O. students:

0-9	10-25	26+
41%	34%	25%

B: Weeks per year teaching D.O. students:

0-4	5-23	24-43	44-52
52%	20%	17%	10%

This table must be interpreted with two factors in mind. First, teaching represents only one aspect of a faculty member's role; faculty enrichment in its broadest sense must consider research, administration, and clinical responsibilities in addition to instruction. Second, 57% of the clinical faculty in the sample are part-time or volunteer teachers who may teach only a few hours per week. The inclusion of these faculty in the table is designed to give a more accurate picture of overall teaching load, but it should be clear that full-time faculty have a higher average number of hours per week and weeks per year teaching.

Finally, it should be noted that hospital-based faculty may have indicated a teaching load which is not consistent from week to week, or even year to year. In view of the difficulties these faculty may have had in estimating the number of hours spent per week with undergraduate students or interns, these figures must be interpreted as a rough guide only.

Professional Life

The number of years since a faculty member completed his or her training, and the number of years spent teaching osteopathic medical school students, may be interpreted as a measure of experience, during which the teacher has had an opportunity to sharpen instructional skills, research and administrative abilities.

TABLE 14

PROFESSIONAL LIFE

A: Years since completion of training:

0-5	6-10	11-20	21-25	26-30	31+	No response
24%	21%	25%	10%	6%	12%	2%

B: Number of years teaching D.O. students*

0	1	2	3	4	5	6	7	8	9	10	11	12+
3%	18%	12%	10%	9%	8%	7%	3%	6%	1%	3%	2%	21%

* Some faculty may have taught at allopathic or general higher education institutions before coming to their osteopathic medical school Therefore, these figures should not be interpreted as an estimate of total number of years teaching.

It was hypothesized that professional life, measured by the variables presented in TABLE 14: PROFESSIONAL LIFE, would be correlated with the "preparation for teaching" variables, particularly in terms of participation in workshops/training sessions on educational issues. This hypothesis was not supported by the data, and is discussed in Section III: PREPARATION FOR TEACHING.

III. PREPARATION FOR TEACHING

The traditional assumption has been that competence in a subject area, such as microbiology or internal medicine, is sufficient for competent teaching. Faculty development programs are based on the fact that even excellent scientists or clinicians can benefit from instructional skills improvement. Toward this goal, formal courses, workshops, and training sessions designed to improve instructional effectiveness in all aspects of teaching have become available for medical school faculties.

There are no prior data available on preparation for teaching within the osteopathic medical colleges. However, Jason's 1961 study of seven M.D. schools[1] and the 1977 AAMC study of faculty development in the U.S. medical schools[2] offer some basis for comparison over the years within allopathic medical schools. During the twenty year period covered by those two studies, medical school faculty preparation for teaching increased from virtually no formal preparation in 1961 to 21% faculty experience in formal courses, and 39% participation in workshops and training sessions in 1976.[3]

In comparison, the survey data on faculty at osteopathic medical schools indicate a somewhat higher level of preparation for teaching. As Tables 15 and 16 indicate, 30% of the faculty have taken a formal course on education/teaching and 51% have attended a workshop or training session.

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[1] Hilliard Jason. "A Study of Teaching Practices at Seven Selected U.S. Medical Schools." Unpublished Dissertation, University of Buffalo, 1961.

[2] Hilliard Jason, et al. Faculty Development Survey. DHEW, Bureau of Health Manpower Contract No. 231-76-0011, December 1977.

[3] *Ibid*. pp. 26-27

These figures are even more striking when it is considered that 45% of those participating in a workshop or training session did so voluntarily.

TABLE 15

PREPARATION FOR TEACHING: FORMAL COURSES

A: Have Taken a Formal Course on Education/Teaching 30%

B: Usefulness of Specific Course:

Topic	Taken course*	Useful**	Not Useful
Educational Statistics	15	73	27
Educational Psychology	20	80	20
Instructional Design	16	85	15
Teaching Methods	23	81	19
Evaluation/Testing	17	85	15
Sociology	16	64	36
Psychology	33	74	26

* These figures are % of total faculty, N-633.

** These figures are % of faculty who have taken the course, N varies for each course indicated.

TABLE 16

PREPARATION FOR TEACHING: WORKSHOP/TRAINING SESSION

A: Have Attended a Workshop or Training Session on Design, Implementation, and/or Evaluation of Instruction 51%

B: Usefulness of Specific Workshops/Training Sessions:[1]

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[1] Table continued on next page.

TABLE 16: PREPARATION FOR TEACHING: WORKSHOPS/TRAINING SESSIONS CONTINUED

B: Usefulness of Specific Workshops/Training Sessions:

Topic	Attended Workshop/* Training Session	Valuable**	Not Valuable
Instructional/Course Design	33	92	8
Lecturing	29	89	11
Small Group Discussion	28	90	10
Alternative Teaching Strategies	17	79	21
Laboratory Teaching	12	82	18
Clinical Supervision/ Teaching	19	92	8
Interpersonal Skill Development/Sensitivity Training	15	78	22
Evaluation of Clinical Performance	18	86	14
Simulation Techniques	12	87	13
Development of Programmed Instruction/Self-Instructional Materials	17	78	22
Computer-Assisted Instruction	8	75	25
Use of Media in Instruction	25	90	10
Evaluation/Testing	26	84	16

* These figures are % of total faculty, N=633.

** These figures are % of those who have taken the workshop/training session, N varies with workshop/training session indicated.

Many faculty members expressed the belief, during personal interviews, that basic science faculty were better prepared for the teaching role through their Ph.D. training. This belief is only partly supported by the survey data. Taken as a whole, clinical science teachers report a significantly lower level of participation in virtually all specific formal courses and workshops/training sessions than basic science teachers (see Supplementary Date Tables).[1]

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[1] The majority of differences are significant at the .01 level.

On the whole, basic science faculty report slightly higher levels of preparation for teaching in both formal courses (37%) and workshops/training sessions (54%). (See TABLE 17, PREPARATION FOR TEACHING: COURSES AND WORKSHOPS FOR BASIC AND CLINICAL SCIENCE TEACHERS).

TABLE 17

PREPARATION FOR TEACHING: COURSES AND WORKSHOPS FOR BASIC AND CLINICAL SCIENCE TEACHERS

A: Basic Science Teachers (N=182)	
Taken a Formal Course	37%
Taken a Workshop/Training Session	54%
B: Clinical Science Teachers (N=434)	
Taken a Formal Course	25%
Taken a Workshop/Training Session	48%

Clinical science faculty are a heterogeneous group; 17% are salaried part-time teachers, and 30% are unpaid volunteers (see TABLE 7: POSITION). The study hypothesized that these part-time and volunteer faculty, for whom teaching may be secondary to a hospital or private practice, would be less well prepared for teaching than their full-time colleagues. TABLE 18: CLINICAL SCIENCE FACULTY PREPARATION FOR TEACHING, bears out this prediction, showing that 31% of full-time clinical teachers have had a course in education/teaching, and 56% have attended a workshop or training session.

Thus, while part-time clinical faculty are less well prepared than basic science faculty, in terms of formal courses and workshops/training sessions, full-time clinical faculty are roughly equivalent to basic science faculty in their formal preparation. These figures most likely reflect the different opportunities presently available to full-time clinical faculty and part-time clinical faculty at any institution and suggest the need for instructional skills programming directed to the part-time clinical faculty population. Differences between full-time clinical faculty with and without practice income were only slight in terms of preparation for teaching through formal courses or workshops/training sessions.

TABLE 18

CLINICAL SCIENCE FACULTY PREPARATION FOR TEACHING

A: Full-time Clinical Faculty (N=172)*	
Taken a Formal Course	31%
Taken a Workshop/Training Session	56%
B: Part-time and Volunteer Clinical Faculty (N=246)	
Taken a Formal Course	22%
Taken a Workshop/Training Session	46%

* Includes full-time clinical faculty with and without practice income.

It is worth noting also that differences in preparation for teaching, as measured by formal courses and workshops, are only slight between bedside teachers and classroom teachers, the latter having only 3% greater reported participation. Finally, there were no relationships between the age of respondents or the number of years teaching, and preparation for teaching. That is, younger and newer faculty were equally likely to have had a course or workshop in education/teaching as their older or more experienced colleagues. However, it may be the case that the experienced faculty have participated in several varying kinds of workshops or training sessions.

Apart from formal courses and workshops on education, a number of informal or unstructured sources have made significant impacts on faculty preparation for the teaching role. These sources include feedback from students and colleagues, role models, and a faculty member's own judgment. The figures presented in TABLE 19: SOURCES CONTRIBUTING TO TEACHING suggest that these informal sources are the most frequently cited contributions to instructional effectiveness.

TABLE 19

SOURCES CONTRIBUTING TO TEACHING

		VALUE**		
Source	Ans. Ques.*	Contributing	No Impact	Detracted
The way I was taught	93	94	4	2
Books and/or articles I have read	97	94	4	2
My own intuition/ judgment	96	98	1	1
Feedback from colleagues	93	94	6	1
Formal and informal feedback from students	97	97	3	0
Observation of colleagues teaching	91	88	10	2
Formal training in education	47	71	26	3
Workshops on teaching	50	77	20	3

* These figures are % of total faculty, N=633.

** These figures are % of those who have used this source.

It is interesting to note in this table that formal courses and workshops on education/teaching are judged to have made a contribution to those who have taken them less often than informal sources are cited as having made a contribution by those who use them. These figures suggest that faculty instructional skills programs, in order to contribute most to teaching effectiveness, might focus on or make use of those areas, such as student feedback or use of educational literature, which faculty are predisposed to value.

Finally, "the way I was taught" was cited as a contribution to teaching practices by 88% of bedside teachers, but only 57% of classroom teachers. These figures most likely reflect the clinical teaching emphasis on role models in patient care, on the one hand, and the emphasis on course content in classroom teaching, on the other. These figures stress the need for effective role models, particularly in clinical education, where "the way I was taught" is an important contribution to a teacher's own style.

Overall, respondents express a relatively high level of interest in workshops and/or printed information on a broad range of components of instruction. These figures are not interpreted to suggest that these areas currently pose problems in the osteopathic medical schools. Rather, these data are taken as a measure of faculty interest in sharpening their instructional skills and in exploring new concepts and techniques in education.

IV. CURRENT EDUCATIONAL PRACTICE

This section will present a summary of current educational practices in the osteopathic medical schools participating in the survey. The summary will include a description of where teaching is done, and the methods used in the various settings. In addition, this section reports on educational resources in current use, apart from formal courses and workshops on education.

Instructional Settings

Differences in the instructional settings in which osteopathic medical school faculty teach was felt to be an important issue. During personal interviews, many faculty members expressed the feeling that the differences among such settings, particularly the classroom and the bedside, were related to the kinds of instructional practices which could be employed. Bedside teachers, it was argued, would benefit little from instruction in lecture technique improvement or evaluation methodologies.

The literature suggests that there may be some validity to this assumption (Stritter, et al. 1965; Miller, et al. 1961). However, this should not imply that clinical training at the bedside cannot be improved through the use of special educational techniques. In addition, As TABLE 20: INSTRUCTIONAL SETTINGS, shows, fully 90% of the respondents teach at least occasionally in the classroom or conference room. Thus, although bedside teachers may benefit from special techniques in bedside teaching, a sufficient percentage of them also teach often enough in the classroom or conference room to benefit from a broader variety of instructional techniques and methods. It may be concluded, therefore, that faculty development programs should not exclude clinical bedside teachers simply because their primary teaching context is different from that of basic science teachers.

TABLE 20

INSTRUCTIONAL SETTINGS*

	Frequency of Teaching			
Setting	Freq.	Occa.	Freq. + Occa.	Never
Classroom/conference room	57	33	90	10
Office	26	40	66	34
Laboratory	24	18	42	58
Patient bedside	33	19	52	48
Patient examining room	32	18	50	50
Hospital corridor	21	21	42	56

* Respondents were able to choose all applicable instructional settings.

Use of Journals

Books and articles were identified as a source contributing to teaching practices by 94% of the faculty surveyed (See TABLE 19: SOURCES CONTRIBUTING TO TEACHING). It might, therefore, be expected that the use of educational journals, at least occasionally, would be high. However, as TABLE 21 indicates, use of the major educational journals is low. The most widely used journal, the Journal of Medical Education, is read by less than one-fourth of respondents, despite the fact that this publication frequently includes articles or notes on faculty development in general, as well as instructional methods and evaluation. These figures are also in contrast to the 82% of faculty who reportedly "turn to the literature" for advice or assistance on instructional issues (see TABLE 25: SOURCES OF ADVICE/ ASSISTANCE). However, respondents possibly listed "literature"as a source of course content material.

TABLE 21

USE OF EDUCATIONAL JOURNALS

Journal	Use: % Freq.	% Occa.	% Freq. + Occa.	% Never
American Educational Research Journal	1	6	7	93
Medical Education	3	7	10	90
Journal of Higher Education	2	7	9	91
Journal of Medical Education	9	12	21	79

This study could have an important impact on the education process in the osteopathic medical schools if its only result was to increase the frequency of reading of such educational journals as Medical Education and the Journal of Medical Education. The low level of reading of these types of journals may be attributed to an assumption that osteopathic medical education differs significantly from allopathic medical education, and that these journals focus primarily on allopathic medical eduction. On the basis of background literature and interviews at the colleges participating in this study, it is concluded that such differences are negligible with respect to the issue of faculty development, instruction/ learning, course design, objectives, evaluation, etc. That is, the similarities between the two types of medical schools are close enough to make these specialized journals relevant to both.

It is also worth stressing that there exists no specifically osteopathic medical education journal. Aside from the Journal of the American Osteopathic Association annual educational supplement, and the Occasional Papers published by Michigan State University, College of Osteopathic Medicine, there are no publications focusing on osteopathic medical education issues. The development of a journal or newsletter designed for osteopathic medical education might go far to help stimulate interest in this broad subject, and increase familiarity with successful, innovative instructional practices and the professional education process in general. This activity would facilitate the development of a network of communication and cooperation among the D.O. colleges.

Reported faculty reading of professional journals in general is shown in TABLE 22: USE OF PROFESSIONAL JOURNALS, A: Hours per Week, along with levels of reading of specific medical journals as listed in B: Frequency of Use. The levels of reading of these journals, by basic science as well as clinical faculty, suggests that they could be an important vehicle for faculty development/medical education topics. Many of these journals are directed toward a wider physician audience, and therefore restrict topics to those of a more clinical nature; some, however, devote space, or an entire issue, to medical education. These journals, particularly those directed primarily to osteopathic physicians, might increase their editorial interest in faculty development and osteopathic medical education if these subjects were requested through letters or submitted articles from osteopathic medical school faculty.

TABLE 22

USE OF PROFESSIONAL JOURNALS

A: Hours per Week Reading Professional Journals:

	1-6	7-12	13 or more
Percent of Total	63	28	9

B: Frequency of Use:

Journal	Freq.	Occa.	Freq. + Occa.	Never
Journal of the American Osteopathic Association	46	45	91	9
The D.O.	41	38	79	21
The Journal of Family Medicine	17	34	50	50
Journal of the American Medical Association	20	48	68	32
New England Journal of Medicine	30	48	78	21
Osteopathic Annals	29	42	71	29
The Osteopathic Physician	29	45	74	26
Osteopathic Medicine	31	40	71	29
Other	47	2	49	51

Use of Resources in Education/Teaching

Interviews conducted in the colleges participating in this study suggest that there is overwhelming agreement among faculty in the osteopathic medical schools that various educational resources are an important part of the teaching/learning process. During these interviews, virtually no faculty expressed the feeling that the traditional lecturer, armed only with a sheaf of notes, could be as effective as the modern educator who can call upon a large variety of teaching techniques and equipment.

Indeed, most of the osteopathic medical schools participating in this study have available to faculty a broad range of resources, including videotapes, motion picture films, programmed instruction materials, MEDLINE capability, and guides for simulations. Further, those which lack any of these resources express willingness to respond to faculty needs by investigating the purchase or rental of special equipment, or by exploring necessary outside professional help.

However, there is something of a "technology gap" between the resources available and the knowledge of their existence, use, or value. It was not uncommon for faculty interviewed to say, "I wish someone would invent ....." not realizing that this invention is in common use in other D.O. schools, or even in other departments.

TABLE 23: USE OF EDUCATIONAL RESOURCES AND TABLE 24: USE OF INSTRUCTIONAL METHODS show the various educational methods and resources by respondents. Not surprisingly, the most widely used resources either frequently or occasionally, are slides (84%), handouts (82%), and assigned texts (80%). Similarly to be expected are the high levels of lecturing (92%) and discussions (88%), and clinical supervision by clinicians (87%) (see Supplementary Data Tables). However, these tables document a relatively lower frequency of use of such resources as computer-assisted instruction (7%), programmed instruction (32%), simulations (45%), and a heavy reliance on textbooks (80%).

A number of faculty comments on simulations offer at least one reason for their low level of use. It was remarked that it is too expensive to hire and train students to simulate illness, that accurate responses from simulation subjects are not guaranteed, and that many faculty simply are unfamiliar with simulation. The growing body of literature, including "how-to-guides" on simulation, suggests that this is one area in which faculty would benefit from special training on the use of such a resource. The same lack of familiarity was uncovered for many under used resources and instructional methods, with computer-assisted instruction leading the list of little-known techniques.

TABLE 23

USE OF EDUCATIONAL RESOURCES

	Frequency of Use			
Resource	Freq.	Occa.	Freq. + Occa.	Never
Slides	59	25	84	18
Audio tapes	17	36	53	47
Audio tapes/slide packages	12	37	49	51
Overhead transparencies	22	28	50	50
Motion picture films	13	50	63	37
Video tapes	19	38	57	43
Simulations	19	26	45	55
Assigned texts	53	27	80	20
Reading lists	39	30	69	31
Handouts	57	25	82	18

It thus appears that while faculty interviews uncovered non-traditional resources and methods, a lack of adequate familiarity with their nature and use in many cases is blocking their full adoptance. This is a situation which may be corrected relatively easily and economically. Most osteopathic medical schools have a broad range of such resources, and many handbooks and guides are available free of charge or at low cost. A brief training session for faculty, conducted by an AV specialist, librarian, or educational techniques specialist, could improve faculty use of such resources and methods where they can be of most value.

TABLE 24

USE OF INSTRUCTIONAL METHODS

	Frequency of Use			
Methods	Freq.	Occa.	Freq. + Occa.	Never
Lecture	78	14	92	8
Mixed lecture/discussion	61	27	88	12
Small group discussion	55	30	85	15
Laboratory teaching	32	23	55	45
Clinical instruction	47	17	64	36
Tutorial instruction	23	33	56	44
Programmed instruction/ self-instruction materials	6	26	32	68
Computer-assisted instruction	1	6	7	93

Sources of Advice and Assistance

It has been argued that the extent to which people seek advice or assistance in a task is a measure of the importance they attribute to that task.[1] This section presents the reported levels of use of various sources of advice and assistance on educational and instructional issues and problems. It should be noted that the availability of advice will differ from context to context, and that the value placed upon sources may vary also.

The figures presented in TABLE 25: SOURCES OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS suggest that the issues on which advice and assistance are sought may be related to content as much as to instructional problems per se. Thus, there is a high level of use of colleagues, either frequently or occasionally, within the department (89%) who may be expected to advise on content matters. On the other hand, those who might best advise on instructional issues, such as a Dean of Education (40%) or an Educational Specialist (35%), are used much less frequently. The high level of use of departmental colleagues may also relate to the ease of contact, and the under use of Deans may spring from a disinclination to highlight instructional problems.

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[1] Hilliard Jason, et al. Op. cit.

TABLE 25

SOURCES OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS

	Frequency of Use			
Source	Freq.	Occa.	Freq. + Occa.	Never
Colleagues within my department	57	32	89	11
Colleagues outside my department	33	50	83	17
Department chairperson(s)	32	40	72	28
Educational specialist(s)	8	27	35	65
Assistant/Associate Dean for Education/Academic Affairs	7	33	40	60
Current Students	28	50	78	22
Former Students	21	47	68	32
The literature	53	29	82	18

The figures presented in TABLE 25: SOURCES OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS may also be affected by the number of hospital-based faculty in the survey population. These faculty may find it difficult to consult some otherwise valued sources of advice which may be available to college-based faculty. In addition, several schools in the survey sent questionnaires only to in-house, college-based faculty. If accessibility affects the figures in TABLE 25 then these figures may be slightly high for use of sources of advice.

The use of educational specialists by college is shown in TABLE 26: EDUCATIONAL SPECIALIST AS A SOURCE OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS BY COLLEGE. The significant finding in this table is that those osteopathic medical schools which have an in-house educational specialist staff show a much higher level of use of such specialists. That is, faculty at schools such as #6 (71%) and #9 (52%) do in fact make use of educational specialists; interviews at these schools indicate that such services are highly valued, and that advice and assistance on many educational/ instructional issues is requested.

TABLE 26

EDUCATIONAL SPECIALIST AS A SOURCE OF ADVICE/ASSISTANCE IN INSTRUCTIONAL ISSUES AND PROBLEMS

	Frequency of Use			
College	Freq.	Occa.	Freq. + Occa.	Never
0 (N=76)	7	21	28	72
1 (N=99)	1	37	38	62
2 (N=60)	8	23	31	69
3 (N=82)	7	22	29	71
4 (N=13)	8	23	31	69
5 (N=58)	14	26	40	60
6 (N=23)	22	49	71	29
7 (N=30)	3	10	13	87
8 (N=128)	5	26	31	69
9 (N=64)	16	36	52	48

The value of educational specialists in the osteopathic medical schools was stressed during interviews at the colleges and at the project sponsored Round Table Meeting attended by representatives from the participating schools. It was pointed out that several factors inhibit the use of such specialists by most of the osteopathic medical schools. The most frequent problem appears to be a lack of funds available to hire educational specialists, either as full-time staff members or as occasional consultants. Although this is a problem for all of the colleges which currently do not have an in-house educational specialist, it was an important consideration particularly in those free-standing institutions which are not located near other colleges or universities with departments of education or educational specialists.

Interviews at several of the participating colleges revealed what appeared to be a lack of commitment to the proposal for an in-house education specialist. The attitude expressed at these schools was one of confidence in the instructional skills of faculty, and a feeling that other programs or staff positions had greater priority. It is hoped that these priorities can be examined in light of the need for and interest in faculty development expressed by faculty.

In view of the perceived value of educational specialists, those schools which presently do not have an in-house educational specialist might first explore means by which such specialists could be hired as full-time staff. Alternatively, these schools might also pursue a consortia arrangement with (1) the geographically closest college or university, either private or public, (2) the other D.O. colleges at a national or regional level, or (3) M.D. colleges within the state. It was repeatedly stressed by representatives from those schools interested in a consortium arrangement that it could be cost effective to ban together in these faculty/educational issues.

V. INTEREST IN INSTRUCTIONAL SKILLS PROGRAM

The survey was designed to tap interest in programs that relate primarily to instructional issues. This section presents data on the levels expressed in participating in instructional skills programs. These levels of interest may be interpreted as an approximate measure of perceived need for such programs, and of committment to the teaching role. Such factors as personal and institutional rewards for program participation will also affect expressed willingness to participate.

As presented in TABLE 27: INTEREST IN PARTICIPATING IN PROGRAMS, the majority of respondents express willingness to participate in programs designed to improve their own instructional skills. It can be seen that peer and student review of teaching (71% and 76% respectively) hold the most interest for faculty -- two traditional techniques which perhaps require the least investment of time for faculty members; student and peer feedback do not require that the teacher deviate appreciably from his or her normal routine. Those activities which would require the greatest committment of time and effort -- collaborative research on teaching and learning, and release time to improve instructional skills -- are the least interesting to respondents (36% and 42% respectively) a finding which is no doubt related to the lack of institutional rewards for such activities and to a primary concern with one's field, rather than education per se. For example, for the clinician this might mean seeing fewer patients in the college-sponsored ambulatory clinics or hospitals. For the basic scientist, this might take time from basic research.

TABLE 27

INTEREST IN PARTICIPATING IN PROGRAMS

Program	Expected Participation: Probably %	Undecided %	Would Not %
A clearinghouse to share written materials and information on teaching improvement activities	48	30	22
Conferences for staff members to share teaching experiences and results	64	21	15
Collaborative research on teaching and learning	36	31	33
Observation and critique of my teaching by peers	71	20	9
Critique of my teaching by my students	76	15	9
A program of self-assessment of my teaching	67	20	13
Observation of master teachers	58	23	19
Release time to work at improving instructional skills	42	29	29
Conferences on developing new or redesigning courses	56	22	22

TABLE 28: PROGRAM PARTICIPATION: DISCIPLINARY AREA AND INSTRUCTIONAL SETTING, compares interest in various instructional skills programs for basic versus clinical science teachers, and classroom versus bedside teachers. The difference between the members of either pair are slight: basic science teachers are somewhat more interested in conferences on teaching experiences (64%) than are clinical science teachers (52%), but the only significant difference between

the two types of teachers is an interest in conferences on new courses (62% vs. 52%; chi^2=4.1407, with 1 degree of freedom, significant at .05 level). Classroom teachers express slightly more interest in peer review of teaching (74%) than do bedside teachers (68%), but this difference is not significant (chi^2=.6738).

TABLE 28

PROGRAM PARTICIPATION
DISCIPLINARY AREA AND INSTRUCTIONAL SETTING

A: Disciplinary Area

	Basic % Science (N=182)		Clinical % Science (N=434)	
	Yes	No	Yes	No
Clearinghouse	51	17	46	15
Conferences on teaching experiences	64	8	52	9
Collaborative research	40	26	33	23
Observation by peers	68	5	68	4
Student critique	74	4	74	5
Self-assessment program	66	7	65	6
Master teachers	57	12	58	13
Release time	48	24	40	20
Conferences on courses	62	12	52	18

B: Instructional Setting

	% Classroom teachers (N=568)		% Bedside teachers (N=330)	
	Yes	No	Yes	No
Clearinghouse	51	15	47	15
Conferences on teaching experiences	68	9	63	11
Collaborative research	38	25	35	26
Observation by peers	74	4	68	5
Student critique	79	4	76	6
Self-assessment program	69	6	65	7
Master teachers	59	13	58	15
Release time	39	22	39	23
Conferences on courses	58	16	52	19

Respondents were asked to indicate their interest in receiving help on each of a number of aspects of instruction, either through printed information, or a short workshop and printed information together. The results from this question are shown in TABLE 29: INTEREST IN RECEIVING HELP ON COMPONENTS OF INSTRUCTION.

TABLE 29

INTEREST IN RECEIVING HELP ON COMPONENTS OF INSTRUCTION

Component	Printed Info. %	Workshop + Info. %	Total Positive Response %	Undecided %	No %
Making the best use of instructional technology/media	44	28	72	9	10
Designing/using Computer-assisted instruction	20	24	44	18	27
Designing individualized instruction	30	23	53	19	16
Producing/using self-instructional packages	28	21	49	20	21
Producing/using simulations	22	21	43	19	26
Formulating educational objectives	33	27	60	15	25
Lecturing	37	39	77	7	17
Leading small group discussions	32	35	67	12	21
Helping a group to function effectively	28	28	56	18	26
Helping the reticent student	32	24	56	17	27
Explaining so undergraduates understand	42	29	71	9	20
Evaluating my own instrutional effectiveness	40	41	81	6	13
Evaluating program (course) quality	41	34	75	8	17
Evaluating student performance	44	33	77	7	16

TABLE 29 Cont'd.

Component	Printed Info. %	Workshop + Info. %	Total Positive Response %	Undecided %	No %
Assessing students' learning styles, characteristics, and needs	32	30	62	15	23
Providing individual supervision of students	33	23	56	16	28
Teaching professional role behavior	27	21	48	16	36
Teaching others the art of diagnosis	28	30	58	9	33
Teaching the effective use of information	36	29	65	13	22
Training professional problem-solvers	29	26	55	13	32
Developing interpersonal skills/sensitivity training	22	29	51	15	34
Developing organizational, management, and leadership skills	24	36	60	11	29
Learning about professional education (generally)	36	27	63	11	26

The highest interest in any form of assistance was expressed for "Evaluating my own instructional effectiveness" (81% total positive response), "Evaluating student performances" (77% total positive response), "Lecturing" (77% total positive response), and "Evaluating program (course) quality" (75% total positive response). These are perhaps interpreted as traditional areas of teacher concern. The high positive interest in a workshop and/or printed information suggests a strong desire to improve these skills, or to benefit from current educational research on such issues.

Less than half of the respondents expressed any interest in computer-assisted instruction (44% total positive response), simulations (43% total positive response), and "Teaching professional role behavior" (48% total positive response). As discussed in the previous chapter, faculty appear to have little familiarity with C.A.I. and simulations, and the lower level of interest in these areas most likely springs from this unfamiliar nature, and not from any specific dislike of C.A.I. or simulations. Also, it was stressed by participants at the Round Table Meeting that several colleges do not foresee having the financial resources to be able to explore this as an instructional alternative.

The results of the survey data regarding faculty interest are also worth noting when examining the results of institutional data collected by Sturwold (1977) in a survey of the MODVOPP schools.[1] Sturwold reports that 100% of the ten D.O. colleges indicate the availability of centralized AV/TV facilities and production equipment; however, 80% self-report that they are actually involved in media production. Indeed, the on-site visits showed that some colleges had invested heavily in the hardware but had not yet acquired adequate staff to explore the educational dimensions of instructional technology. Perhaps faculty also recognize that production equipment is available and that it is not being used as much as they could hope.

The total positive response of 48% for "Teaching professional role behavior" may have been lowered by the inclusion of basic science teachers, who are perhaps less concerned than bedside teachers with role behavior. Indeed, 55% of bedside teachers express an interest in a workshop and/or printed information on "Teaching professional role behavior."

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[1] Virginia G. Sturwold. Instructional Technology in the Health Sciences. Final Report to D.H.E.W., National Library of Medicine, National Medical Audiovisual Center, 1977.

It was noted earlier that during interviews faculty reacted positively to the use of various traditional and some innovative forms of instructional technology. As TABLE 29: INTEREST IN RECEIVING HELP ON COMPONENTS OF INSTRUCTION shows, 72% of the respondents would like a workshop and/or printed information on "Making the best use of instructional technology/media," a figure which reinforces the impression from these interviews.

In view of the fact that a majority of respondents express an interest in programs and workshops designed to address their instructional needs, it is useful to consider briefly the formats and schedules such programs should take. Faculty were asked to chose among a number of formats, both on-campus and off. The results of this question for all respondents are presented in TABLE 30: CONVENIENCE OF PROGRAM FORMATS.

TABLE 30

CONVENIENCE OF PROGRAM FORMATS

Format	Very convenient %	Convenient %	Total convenient %	Not convenient %	Not interested %
A: On-Campus:					
Brown bag lunch	34	24	58	21	21
Half-day	31	35	66	17	17
Full-day	18	26	44	38	18
B: Off-Campus:					
Half-day	13	32	45	36	19
Full-day	13	21	34	45	21
C: Hospital:					
Brown bag lunch	27	26	53	23	14

The most popular format would be on-campus for one half-day (66%); an on-campus brown-bag lunch is nearly as convenient (58%). A full-day off-campus appears to be the least convenient (34%).

Despite these conclusions, each college should conduct its own survey of faculty to determine what format would be best at that particular institution, at any given time. Some osteopathic medical schools have reported high turnouts to off-campus retreats, while at least one other has had little success in attracting faculty with any format. These experiences serve to stress that the format of a program may be less important in generating high response than the perceived value of the program to participants.

TABLE 31: PREFERRED PROGRAM SCHEDULE, presents data on the scheduling preferences for faculty/staff programs. Although there was no concensus on this question, a once-a-month program appears to fit best into faculty schedules.

TABLE 31

PREFERRED PROGRAM SCHEDULES

Schedule	Percent Selecting this Schedule*
Once a week	6
Twice a month	14
Once a month	48
Periodic (e.g. once a semester)	13
Occasional (e.g. when needed)	8

* Respondents could select more than one schedule.

From these tables it may be concluded that an on-campus program or workshop, held once a month, will be the most convenient for faculty.

Faculty also were asked to indicate if, in their opinion, continuing medical education (C.M.E.) credits should be awarded for various activities related to faculty development and instructional issues. These results are presented in TABLE 32: C.M.E. CREDIT FOR INSTRUCTIONAL ISSUES ACTIVITIES.

TABLE 32

C.M.E. CREDIT FOR INSTRUCTIONAL ISSUES ACTIVITIES

	Awarding C.M.E. Credit:		
Activity	Should	Undecided	Should not
Successful completion of self-study materials on teaching	64	20	16
Successful completion of self-study materials on student evaluation	51	29	20
Attendance at a workshop dealing with instruction and/or instructionally related activities	77	13	10
Participation on a planning evaluation committee on osteopathic medical student instruction	63	20	17
Attendance at a workshop dealing with osteopathic medical issues	73	17	10

A majority of all respondents feel that most of these activities should be awarded C.M.E. credit; "Completion of self-study materials on student evaluation" is not high enough to insure a majority. However, when clinical science teachers are singled out in the results, their responses are largely in favor of C.M.E. credit for all of the mentioned activities, particularly "Attendance at a workshop dealing with instruction and/or instructionally related activities" (86%), and "Attendance at a workshop dealing with osteopathic medical issues." (84%).

In summary, this chapter documents a considerable interest among respondents in participating in a broad range of faculty development and instructionally related activities, particularly those which will strengthen the traditional areas of lecturing and evaluation -- both of students and of the teacher him/herself. These survey results are consistent with information collected during personal interviews with faculty at the osteopathic medical schools. It is possible that the benefits to be gained from such programs may stimulate increased interest in other, not-so-traditional instructional methods, such as simulations and computer-assisted instruction.

VI. ISSUES IN FACULTY DEVELOPMENT

This chapter presents the data obtained in the five model faculty development program on-site visits and assesses the applicability of the model programs to the osteopathic medical colleges. The approach used in describing the models is to identify the various program components and then to discuss the important structural and inter-organizational issues that cut across these faculty development models. The chapter concludes with an analysis of the faculty development issues in osteopathic medical colleges and suggestions for the osteopathic medical colleges regarding implementing faculty support programs.

A major assumption at the outset of this project activity is that similarities between the process of medical education in the osteopathic and allopathic medical colleges are close enough to justify the careful consideration of faculty development in M.D. institutions. This assumption led to the examination of the allopathic models; as the osteopathic medical colleges plan their future development, they have a unique opportunity to adopt the best and most successful experiences in faculty development from the allopathic profession as well as the entire higher education field.

Model Programs

As reported earlier in the Introduction section, the five model programs were selected with the in-put of several faculty development experts knowledgeable about programs in medical settings. These models offered a range of activities and structural formats. The five model programs were comprised of:

1) A program in a private medical school. In this case, the school of medicine was located in an urban setting as part of a private and well-established nationally known nonsectarian university. The program of support services for medical school faculty was a component of an Office of Education located within the Dean's office. The Office of Education also provided support services, such as counseling, for medical students. The faculty support activities were supervised by the Office of Education Director, a Ph.D. level professional, and were coordinated by an M.A. level education specialist. A secretary completed the staff.

2) A comprehensive program in a medical school in a large health sciences center. In this model program, the nationally known medical college was part of a publicly supported university located in an urban setting. Faculty support services for medical faculty were integrated in the Office of Medical Education which also provided assistance to medical students. This office was supervised by an M.D. who is nationally known in his specialty field. Faculty support programs were coordinated by an experienced Ph.D. education specialist who also coordinated continuing medical education programs for the medical school. Other staff included: a director of media and three media staff members; a librarian; a learning specialist; an executive secretary; and a research assistant.

3) A program in a medical school that had conducted activities for hospital-based faculty. In this case the faculty support program was part of an educational services research division. There were seven full-time professional staff members, one of whom coordinated faculty support programs.

4) A medical college using several community-based, non-profit hospital corporation centers for clinical training. In this case, the medical college was affiliated with a state university and established to provide primary care physicians. Faculty support for volunteer clinicians was examined by visiting one of the hospital corporations located 65 miles from the medical college. The hospital corporation was comprised of two hospitals and was also used for clinical training by another state supported medical school. Support services for unpaid volunteer clinical faculty were coordinated within the equivalent of the hospital's medical education office. Office staff included a director of medical education; a full-time assistant dean of the college who also served as deputy director of the office and coordinator of the internal medicine department in one of the hospitals; and a learning specialist who assisted in coordinating clinical clerkship activities. The medical college's office of curriculum implementation and development provided support activities for the hospital-based teaching physicians.

5) A comprehensive program located within a large health sciences center primarily serving medical school faculty but also serving faculty in five other programs: allied health professions; basic science; dentistry; nursing; and pharmacy. Staff members included six full-time and six part-time (joint appointments) faculty.

Issues in Model Programs

Administrative Support One of the main factors contributing to the success of faculty development program models was recognized support for the improvement of teaching by the power structure/administration. "If the Dean (or his equivalent) does not support the improvement of teaching, forget it," was a comment frequently mentioned. The administrative position of model programs was either within the Dean's office or the equivalent to the Dean's office at the larger health sciences centers.

In addition to the high-level program location within the organization's structure, administrative support for faculty development was demonstrated through adequate operational funds. Programs that received foundation and federal support for special projects did not rely on outside sources of funding. Professional staff were recruited and salaried. Faculty development programs were directed by males, qualified with either a Ph.D. in an educational field or an M.D. degree and experienced in their respective fields. Program staff had technical capabilities and qualifications at the Ph.D. or M.A. level.

Program Activities In all model programs, faculty development was an integrated support service within a medical education or curriculum implementation office. These support programs were directed toward the individual and collective needs of medical school faculty and toward the institution's needs. Examples of program efforts are outlined, although the following does not represent a single program.

(1) EDUCATIONAL PLANNING/FACULTY DEVELOPMENT

- faculty seminars/workshops regarding new developments in instructional design and educational technology.
- individual consultations/feedback on teacher performance (including videotaping lectures and classroom observation) and student feedback.

- investigation and utilization techniques in the area of clinical teaching
- access to a production/work area with a transparency maker, dry mount press, slide editor, laminator, photo copy stand, camera, drafting table, as well as all supplies and materials

(2) INSTRUCTIONAL DEVELOPMENT

- assistance in developing new instructional materials: syllabus and other print media; audiovisual/non-print media (selecting media, writing scripts and simulations, designing graphics)
- assistance in curriculum revisions/development
- assistance in identifying educational objectives
- assistance in identifying educational resources: audiovisual; television; media preparations; and computer-assisted instruction

(3) EVALUATION

- of student achievement (assistance in writing test items, establishing criteria for student evaluation)
- of support services (through a needs assessment vis-a-vis surveys and workshops)
- of teaching efforts (developing/conducting student ratings of teacher performance)

(4) STUDENT SUPPORT SERVICES

- study assistance through peer and upper class tutoring programs
- Hanau study skill training
- operation of a learning resources center
- student counseling
- self-instructional programs; access to computer assisted programs at the University of Illinois School of Basic Medical Sciences

and data bases at the Ohio State University College of Medicine and the Massachusetts General Hospital

(5) MEDIA LIBRARY

- maintenance, distribution, and operation of projection equipment, and related audio-visual equipment for use in the classrooms and lecture halls
- coordination of library facilities including the storage and retrieval of all non-printed educational material and software

(6) PLANNING AND ADMINISTRATIVE SUPPORT

- developing new programs
- developing institutional policy for faculty recognition for educational effort
- developing procedures for better resources management
- managing the continuing development of goals/sub goals of the various units

Faculty Development Workshops/Seminars Program activity most widely used was the workshop/seminar. Workshops were staffed by the college's faculty development specialist(s) and by outside consultants who could attract a large audience because of his/her outstanding reputation. The workshop topics were identified and based in most cases on an assessment of faculty needs conducted by a survey of faculty and/or student ratings of teacher performance. The outcomes of workshop activities were regarded as opportunities to: (1) have contact with faculty; (2) offer skills in a particular instructional activity; and (3) respond directly to faculty needs. A change in behavior toward better teaching was not recognized as an outcome behavior solely attributable to attendance at a workshop.

The following is a listing of the variety of workshop topics developed for clinical faculty:

- patient management problems
- problem-oriented medical record
- history and physical interviewing skills
- constructing written simulations
- evaluating clinical skills and student performance evaluations
- effective methods in residency training
- the doctor/patient encounter

The following list represents workshop topics developed for both clinical and basic science medical school faculty:

- preparing multiple choice exams and test construction
- inter-personal skills
- eliciting student feedback
- developing competency statements (behavioral objectives)
- how to teach for competency and assess learning
- lecturing skills
- human interaction skills
- integrating professional and personal growth
- guided design as a technique for learning
- developing self-instructional packages
- a clinic on meetings

- course design and curriculum planning/development
- audio-video taping as a learning tool

Several different workshop formats were found effective:

(1) didactic approach combined with individual self-instructional packages and materials,

(2) videotaped sessions with a small group of participants and a facilitator examining a physician/student interview,

(3) role playing involving problem-solving of a paper case,

(4) clinical vignettes with discussion,

(5) videotaped microteaching with individual feedback.

Faculty Development Program Participation/Feedback Program activities that were effective provided for extrinsic and tangible rewards as well as the intrinsic and personal commitment factors associated with teacher/ faculty excellence. The kinds of tangible rewards offered by all five model programs for workshop participation was Category I C.M.E. credits. Some model programs also provided assistance in the national publication of curriculum innovations and active support for promotion and tenure based on teaching achievements. Programs appealed to personal commitment to instructional skill improvement through private consultations with individual faculty members with the essential follow-up sessions. In some cases, program participation was required as a faculty responsibility. However, many programs found voluntary program participation valuable.

Faculty Consultations Based on student ratings of faculty performance as teachers, individual consultations were held with faculty. In some programs, lectures or bedside teaching sessions were video-taped and were later reviewed on a one-to-one basis for educational process. These individual sessions were also opportunities to work on personal and professional growth plans; career interests; follow-up tied to workshop objectives; and efforts associated with cultivating the intrinsic rewards that are part of the faculty role.

Evaluation of Faculty Development Programs Model faculty support programs evaluated workshop activities by soliciting feedback from participants. Other program activities were evaluated by documenting the number of faculty using program resources. Other program outcomes, such as greater faculty appreciation of teaching, were found difficult to measure.

Special Programs Two model programs had conducted successful support activities for the hospital-based clinician population. In one case, a series of seminars for hospital-based faculty, spurred by the interest of a hospital Director of Medical Education and Chairman of the Department of Internal Medicine, was developed. This activity was funded by a special project federal grant. One hour sessions were offered weekly over a two-month period in the hospital setting. The success of these seminars was attributed to identifying problems commonly found in clinical instruction and demonstrating solutions based on instructional design methods. C.M.E. credits were also awarded. In another college, an important component of support activities was to provide clearly defined statements of teaching roles and responsibilities for clinicians along systems management techniques; role compliance was encouraged by appealing to personal commitment to teaching, offering C.M.E. credits for the year of teaching and a college appointment. One of the 9-point definition/guidelines statements was that faculty should have a "commitment to personal teaching skill improvement." The college, through its hospital-based Assistant Dean, indicated to clinicians that "teaching is a skill that needs to be consciously considered and actively pursued." To this end, periodic seminars were planned for teaching skill development. One successful 1½ day orientation seminar, funded by a Kellogg grant and approved for 13 Category I C.M.E. credits, was held on identifying personal teaching skills and instructional style in the hospital setting. The college, through the office of curriculum, had also conducted two workshops to orient hospital-based faculty to the college curriculum and to increase ease and experience with student performance evaluation and documentation.

In another program, the support activities for preceptor physicians included offering such workshops as (1) a needs assessment, (2) the initial student/physician interview, and (3) goal setting for the preceptorship program. The needs assessment workshop used the nominal group process which yielded a priority ranking of problems that represented group cohesiveness. Later, a planning group consisting of on-campus personnel, as well as a liaison preceptor, met to develop ways of meeting identified preceptor problem/needs and to produce the evaluation forms and materials. Programs delivered by this process were valued as worth the time and effort.

A special activity offered in one model program which could be adopted in the four year D.O. colleges was a summer program in which both basic and clinical sciences faculty, students, and staff daily participated in seminars in medical education and developed new instructional materials. The activity assisted participants in identifying the various curricular reforms and spurred individual faculty interest in curriculum materials development.

Applicability of Model Programs to Osteopathic Medical Colleges

The approach used in assessing the applicability of model programs to osteopathic medical education is to examine those issues obtained in the model visits and to compare them to the similarities and differences of issues that cut across the various osteopathic institutions participating in this study. Data about the osteopathic colleges were obtained from the on-site visits at eight of the participating institutions, the further comments section of the survey questionnaries, from the Project's Advisory Committee, and from a discussion of the survey data at a Round Table Meeting of representatives from the participating institutions.

In order for faculty development programs to be effective in osteopathic medical colleges, it is axiomatic that support for the improvement of teaching be demonstrated by the power structure/administration of these institutions and that such support should include: (1) the high level priority and location within the organizational structure, (2) financial support through planned budget allocation from operational funds to staff with professionals and (3) programming that is comprehensive and directed toward both the needs of the individual faculty member and his/her institution.

Issues that cut across the various osteopathic medical institutions in this study that are unique to the osteopathic colleges are described as follows.

Administrative Support Three of the ten osteopathic colleges surveyed have educational specialists and/or plans for comprehensive offices of medical education. Part of the problem for the seven other D.O. colleges is that these institutions have not examined the benefits of an office of medical education and have not yet recognized the value of an educational specialist's expertise. Also, the main focus at some of these colleges has been to provide patient care services through college operated clinics and hospitals. The following statement captures the present institutional focus: "If you have good patient care, good teaching will follow." This is in contrast to the attitude found in model programs in which it was recognized that (1) teaching is a skill that has to be actively pursued, (2) reputation as an outstanding physician does not necessarily mean teacher excellence, and (3) workshop activities were planned to develop teaching skills. The seven schools that presently do not have educational specialists might examine their priorities in light of the need for and interest in faculty support programs expressed by faculty and in relation to those found in the model programs visited.

Resources The structural arrangements of the D.O. colleges are in contrast to M.D. schools attached to highly developed and well-reputed universities with several resources such as staffed libraries, sophisticated computer facilities, media centers, and the traditional resources associated with such higher education institutions. Four of the osteopathic medical colleges are privately-supported and free standing. Two are publicly-supported and free-standing. The remaining four colleges have affiliated with state-supported universities. The following describes the affiliation arrangements of these four colleges:

- a technical college in which the D.O. college has just moved into its newly constructed buildings located on the premises of this institution
- a state college (teacher-training oriented) which is 45 miles away from the D.O. college. Other higher education institutions, however, are closer to the D.O. college.
- a state university that suffered a severe enrollment decline and has changed chief administrators during the planning/ development stage of the D.O. college
- a state university with an M.D. school. Although the D.O. college is located at the site of this state university, the D.O. college is scheduled to move within the next several years to a site 50 miles to the south.

Thus, the D.O. colleges that are affiliated with state-supported institutions do not have access to large resource facilities. A lack of these resources is, therefore, a central problem facing the osteopathic medical colleges.

There are several alternatives available for colleges that do not have offices of medical education. One option is to explore ways of using present resources to meet faculty needs. Another possibility is to consider a consortium arrangement with (1) the geographically closest college or university, either public or private, (2) the other D.O. colleges at a national or regional level, (3) the M.D. colleges in the state. A third step is the establishment of an informal network among the D.O. colleges to share information on issues relating to medical education and faculty-support services. Because there are so few D.O. colleges, all of the institutions would benefit from a common communication system.

Programs for Volunteer Clinical Faculty Some of the model programs have developed successful activities for the hospital-based volunteer clinicians that should be considered by the osteopathic medical colleges. The osteopathic teaching hospitals, individually or collectively, might consider ways of sharing information about common problems and concerns. It was found that the model programs were able to locate "special projects" federal money and philanthropic support for such hospital-based faculty activities. The osteopathic colleges might consider ways to provide preceptor physicians with orientation workshops on the college curriculum and activities to facilitate evaluation of student performances, two examples of useful support services provided by the model programs for preceptors.

Rewards for Program Participation in Osteopathic Medical Colleges A variety of rewards for program participation was used in the model programs. C.M.E. credits, as a reward, are currently not available for the osteopathic faculty, perhaps reflecting the unrecognized value of such acitivities. In view of the fact that all model programs found this reward useful, it is recommended that the colleges collectively examine the possibilities of providing C.M.E. credits for faculty instructional skills workshop activities within the osteopathic medical profession. In the immediate future, D.O. colleges are advised to explore the other kinds of reward mechanisms available. It seems especially important that the colleges generate adequate interest and motivation in support activities through appeal to faculty commitment to teacher excellence and that teaching is a skill that can be actively acquired.

Growth and Development of Osteopathic Medical Colleges In contrast to the well established allopathic medical schools, a majority of the osteopathic medical colleges were in the early stages of growth and development; three colleges had students enrolled only in the first and second years of the curriculum, and three others had just recently graduated a first class. As such, however, the smaller, newly established publically-supported colleges were able to plan for faculty/institutional needs. For example, two colleges had initiated comprehensive offices of medical education similar to the model programs. A third state-supported school had successfully secured foundation support for faculty enrichment activities; held two faculty/administration college retreats; and had a college-wide faculty development committee. Indeed, the newer colleges seem to be moving ahead in this area faster than many of the established, private osteopathic medical colleges. However, given adequate interest by their faculty and administrators, established, private colleges may have fewer problems redirecting their resources to provide faculty support services than state-supported schools. Therefore, taken as a whole, the osteopathic medical colleges -- the new, publically-supported schools with nacient faculty development programs, and the older private colleges with a growing interest in faculty development -- have a tremendous potential, individually and collectively, to plan and implement outstanding programs to meet the respective needs of their faculty and their institutions.

In summary, this chapter examined the issues that cut across the model programs and assessed their applicability to the osteopathic medical colleges. The unique differences for the colleges of osteopathic medicine were identified. Suggestions for the development of faculty-support programs based on the five model programs were related to: administrative support; availability of resources; programs for part-time clinical volunteer faculty; and rewards for program participation.

VII. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the major findings of the needs assessment and model program components of this study, and offers recommendations based on the information obtained. Summary material is organized into the following categories: background characteristics; preparation for teaching; current educational practices; interest in instructional skills programs; and issues in faculty development. A final section presents recommendations emerging from this study.

Background Characteristics

Faculty teaching in the osteopathic medical schools are a heterogeneous group which does not lend itself easily to simple description. The "average" faculty member is a male, 41 years old, who holds a D.O. or Ph.D. degree. He has taught D.O. students for about six years, and most likely had some professional experience prior to his osteopathic medical school appointment, consisting of either private practice or teaching/research in another institution.

Two variables proved to be of special interest. First, the disciplinary area -- basic or clinical science -- in which a faculty member teaches was a factor related to other background characteristics which may effect faculty development programming. Basic science teachers tend to be relatively new; three fourths have taught in a D.O. school for five years or less, and most are under 40 years old. By contrast, clinical science teachers tend to be older, and have taught D.O. students longer than their basic science colleagues. Basic science faculty have had more teaching experience at other types of institutions prior to their joining a D.O. school faculty.

Second, nearly one-half of the faculty are part-time or volunteer teachers who may have limited contact with students. Similarly, one-half of the faculty surveyed teach D.O. students only four weeks or less per year. This limited contact time requires that part-time and volunteer faculty do the best possible jobs; they may not have the luxury of "trial and error" in teaching available to full time faculty.

Finally, it was found that women are well represented in the osteopathic medical school faculties. Women D.O.'s constitute a percentage of D.O. faculty which is nearly twice as high as the percentage of women among all D.O.'s in the U.S. In addition, it was found that women occupy professorial ranks in proportions equal to those of men. Nonetheless, the majority of women faculty hold a Ph.D. degree and teach a basic science, while the majority of men hold a D.O. degree and teach a clinical science.

Preparation for Teaching

The study considered a number of specific formal and informal sources of training and experience for teaching, and their perceived value to faculty. The most highly valued and frequently cited sources of background and preparation for teaching are informal, unstructured experiences and advice. The faculty member's own intuition and judgment, teaching role models with which the faculty member is familiar, and feedback from students and peers have contributed to virtually every faculty member's teaching practices.

Formal courses on education/teaching have been taken by about one-third of the faculty. Courses on instructional design and evaluation/testing were judged to be most valuable. It was assumed that the majority of those taking such courses did so as students, and that the demands of the faculty role preclude additional participation in formal courses after the completion of training for a professional degree.

Formal workshops and training sessions on education/teaching have been taken by about one-half of the faculty. Workshops on traditional teaching skills -- course design, lecturing, discussion, clinical teaching, and use of media -- were most highly valued. More innovative topics -- computer-assisted instruction, programmed/self instruction, and interpersonal skills development -- were less popular but were found useful nonetheless. It was assumed that workshops/training sessions were taken after entry into the faculty position, and are a more convenient format for instructional skills programs.

Two variables are related to levels of preparation for teaching as measured by formal courses and workshops/training sessions on education. First, full-time faculty reported significantly greater participation than part-time and volunteer faculty. It was concluded that accessibility to on-campus programs accounts for much of this difference. It was also noted that this finding tends to contradict the widespread impression in the colleges that basic science faculty are better prepared for teaching than are clinical science faculty.

Second, older faculty members, and those who have taught longer, were found to value formal workshops and training sessions on education more than their younger, newer colleagues. Younger faculty were found to value informal experiences and advice more often than older faculty. Accessibility may account for much of this difference also; it may be assumed that older, more experienced faculty have had more opportunities for participation in formal workshops and training sessions, and more opportunities to recognize their value to teaching.

Current Educational Practices

A wide range of instructional methods and resources are employed by faculty as a whole, but the instructional methods most frequently cited are the traditional techniques of lecturing and discussion. Only two instructional methods -- programmed/self instruction, and computer-assisted instruction -- were used by less than one-half of the faculty. The most commonly used resources in teaching are slides, assigned texts, and handouts.

The use of educational methods and resources appears to be related to teaching experience. Older faculty, those teaching D.O. students longer, and full professors, were found to use virtually all instructional methods and resources more often than younger, less experienced, or lower ranked faculty. Although the differences were small, the consistent pattern suggests that faculty gain familiarity with a wide range of resources, and increase their use, as their teaching experience increases.

Not surprisingly, the use of educational methods and resources was also found to be related to the settings in which teaching takes place. Virtually all clinical science teachers in the survey deliver lectures at least occasionally, but also employ small group discussions and clinical supervision regularly. It was concluded that the settings in which clinical instruction takes place, such as hospitals, clinics, examining rooms, patient bedsides, etc., to a great extent effect the range of methods and resources clinical science teachers may use. Similarly, basic science faculty teaching is more or less restricted to the lecture hall and laboratory; these are settings most frequently cited by basic science teachers, in which audio-visual technology is most adaptable, and lecturing or directed supervision is more convenient.

A number of sources of advice and assistance on educational/ teaching issues are used by faculty. Colleagues within the department are most frequently consulted; colleagues outside the department and current students also were mentioned as sources of advice by large percentages of faculty. However, it is possible that some faculty responded to this question in terms of course content issues, rather than instructional issues per se.

Educational specialists and Deans for academic affairs are the least often utilized sources of advice and assistance, but it should be noted that most schools do not have an in-house educational specialist. Those colleges which do have an in-house educational specialist reported relatively high use of this source. Despite the recognized value of such specialists, it was concluded that those colleges which do not currently have in-house educational specialists lack a strong commitment to hiring such a resource person, even where plans exist to do so.

Finally, educational journals, including those oriented specifically to medical education, were used infrequently. Only one-fifth of the faculty reported consulting The Journal of Medical Education even occasionally. Furthermore, there are no journals oriented primarily to osteopathic medical education. It may be concluded that the low level of use of educational journals has resulted in a correspondingly low level of familiarity with current research on medical educational issues, particularly in the absence of in-house educational specialists or faculty development programs.

Interest in Instructional Skills Programs

There is a broad base of interest in instructional skills programs in the osteopathic medical schools. A majority of faculty indicate an interest in participating in formal programs designed to improve their instructional effectiveness.

The greatest interest was expressed in programs designed to improve traditional teaching skills: lecturing; evaluating students performance; use of media; self-evaluation; and course evaluation were topics for which assistance was most often requested by faculty. Even more innovative topics, such as computer-assisted instruction and programmed/self instruction, were of interest to at least one-half of the faculty.

Expected levels of participation in such programs are high. It was anticipated that perhaps two-thirds to three-fourths of the faculty would voluntarily participate in programs on peer and student review of teaching, self-assessment, and the sharing of teaching experiences. The preferred format for such programs is an on-campus workshop held once a month. A majority of faculty felt that C.M.E. credit should be awarded for participation in programs designed to improve their teaching skills.

Issues in Osteopathic Medical Education

A study of faculty development programs at five allopathic medical colleges emphasized that the similarities between osteopathic and allopathic medical education are close enough to warrant careful consideration of exisitng programs in medical education, be these in allopathic or osteopathic schools.

Several conclusions were drawn from these model programs. First, administrative support was an important factor in the success of model programs. The Dean's office or its equivalent was the most effective location for program administration. Adequate funding and professional staff were vital. Second, faculty development programs were integrated with medical education or curriculum implementation programs. Faculty development was a part of a broader concern with individual and institutional excellence. Third, faculty development efforts were effectively designed to offer a broad range of support through diverse formats and topics.

The model programs reinforced conclusions drawn elsewhere in this report. Programs addressed individual faculty and institutional needs and interests primarily through workshops. Intrinsic and extrinsic rewards were provided for program participation. Special programs for hospital-based clinical faculty and preceptors were developed, which utilized a number of innovative problem-solving approaches for clinical education.

The model programs in M.D. schools were attached to major universities, and thus had easy access to a wide range of sophisticated resources. The lack of such resources at many of the osteopathic medical schools presents the major problem in implementing full-scale faculty development programs without major allocations of already limited financial resources. Thus, it was concluded that careful planning at every level will be necessary for many of the osteopathic medical schools to make the most effective use of available resources, and to plan for the acquisition of additional resources. The benefits of such careful planning will lie in the process of clearly defining faculty needs and interests in each particular college, and in the design of special programs to meet these requirements. Existing programs in the health professions and in higher education in general are valuable models. However, the unique opportunity presented to the colleges of osteopathic medicine is their ability to institute innovative, clearly directed programs for their special faculty and institutional needs.

Recommendations

The broadest recommendation emerging from this study is that the colleges of osteopathic medicine, singly or in concert, should explore ways and means to act upon the need for and interest in faculty development expressed by faculty in this study. The following recommendations are designed to offer some direction in that process.

-- Faculty development programs should be initiated at those colleges which currently lack them. Colleges with faculty development programs should evaluate them in terms of the present study.

-- The single most valuable resource in faculty development programming is an in-house educational specialist with expertise in this area. Those colleges which lack such specialists should direct planning efforts toward this goal. Those colleges with in-house educational specialists should use the expertise of these individuals in faculty development programming.

- The specific needs and interests of faculty in each college should be surveyed by the appropriate administrative office, educational specialist, or faculty development committee. The findings of the present study should be evaluated in terms of the results of these individual college surveys.
- Initially, faculty enrichment programs should attempt to tap interests currently expressed by faculty. Traditional teaching skills of lecturing, evaluation, and course design are an excellent starting point. More innovative subjects may be introduced as faculty become familiar and comfortable with the program.
- Faculty should become more familiar with existing educational resources in their colleges. Audio-visual personnel, library staff, or experienced colleagues are excellent and accessible sources for formal or informal programs to acquaint faculty with possibly unfamiliar resources.
- Part-time faculty should be included in any programs designed to improve instructional skills. This may require special programs for off-campus clinical faculty.

-- Good communications must be maintained between each college and its affiliated hospitals. The colleges should strengthen efforts to insure that the clerkship and preceptor experiences of students conform to the goals of the college. This may require special instructional skills programs for hospital-based, clinic-based, and preceptor faculty.

-- Successful programs will require the strong support of the college administration. Support must include adequate budget and professional staff, sufficient authority for program personnel to implement and conduct programs, and program planning that is clearly articulated with the goals of the institution.

-- Rewards for faculty participation in programs must be created. Model programs in allopathic colleges offer C.M.E. credit for participation, a strategy which should be considered by the osteopathic schools. Recognition of instructional skills improvement should be considered in promotions or salarly increases. Intrinsic rewards should be fostered.

-- Faculty development resources may be shared for most efficient utilization. A formal consortium of osteopathic medical colleges appears to be the most promising arrangement; several consortium models exist, and should be reviewed carefully. Alternatively, cooperative networks should be established for the exchange of information. At a minimum, small-scale networks should be created among college-based educational specialists, audio-visual personnel, department chairmen, or Deans for academic affairs.

-- The use of educational resources at neighboring colleges, universities, M.D. schools, or D.O. schools should be considered. These institutions may serve as models for faculty development programs, or as sources of educational advice and consulting.

-- Faculty and staff should explore educational resources available through various support organizations. These include professional organizations in faculty development for both higher education and medical education, and such service institutions as the National Medical Audiovisual Center.

-- A journal or newsletter devoted to osteopathic medical education should be created as a forum for research results, sharing experiences, and advice. Faculty should also be encouraged to conduct and publish research on educational issues in existing journals and newsletters.

-- An up-to-date data base on osteopathic medical school faculty should be initiated. It is recommended that annual surveys of faculty be conducted which will include demographic characteristics and variables related to the academic context. In this regard, it is also recommended that the colleges formalize and standardize their criteria for and definitions of academic rank.

-- Finally, the need for and interest in faculty development and the improvement of instructional skills should be met by a commitment to this goal by the federal government. It is recommended that the Health Resources Administration continue its commitment to the Health Manpower Act by supporting the growth of instructional excellence and high quality medical education at those medical schools with strong emphasis on the training of family and general practitioners.

APPENDICES

APPENDIX A

FACULTY SURVEY QUESTIONNAIRE

OSTEOPATHIC MEDICAL FACULTY SURVEY

American Association of Colleges of Osteopathic Medicine

1978

4720 Montgomery Lane, Suite 609, Washington, D.C. 20014

II-88

**AMERICAN ASSOCIATION OF COLLEGES
OF OSTEOPATHIC MEDICINE**

4720 MONTGOMERY LANE, SUITE 609, WASHINGTON, D. C. 20014
301 — 654-5600

Dear Faculty Member:

You are being asked to participate in this study along with members of the teaching faculty at nine other osteopathic medical colleges and the teaching physicians at the affiliated hospitals.

This study is part of a one-year contract awarded to the American Association of Colleges of Osteopathic Medicine by the Bureau of Health Manpower to identify the educational experiences, views, and concerns of osteopathic medical faculty and teaching physicians on educational issues. The questionnaire being used was designed with the assistance of administrators and faculty of the participating colleges. The data it collects will assist those institutions presently engaged in planning faculty/staff support programs as well as osteopathic medical colleges interested in initiating support programs to improve teaching. This questionnaire will also provide a baseline of information for use in future surveys. All responses will be strictly confidential; no mention will be made in the reports of individuals either by name or by institution.

Completing the questionnaire promptly and returning it within the week to your institution's liaison to the Project* will greatly help this study.

Each college will receive a confidential summary report of its own data and a copy of the final report. Again, anonymity of individual respondents will be preserved; these reports will not identify the names of those completing the questionnaires. Thank you very much for your cooperation.

Sincerely,

A. J. McNevin

Anthony J. McNevin
Executive Director

Sylvia Sharma

Sylvia L. Sharma, Ph.D., Director
Faculty Assessment Project

*College liaison to the Project:
- CCOM - Robert Kistner
- COMS - Elizabeth Burrows
- KCOM - Claus A. Rohweder
- NJSOM - Robert L. Thompson
- NYCOM - Judith Peretz
- OU/COM - Sandra Inglis
- OkCOMS - John Barson
- PCOM - Robert England
- TCOM - J. Warren Anderson
- WVSOM - Benjamin Boelcskevy

Affiliated hospital liaison: Director of Medical Education

Osteopathic Medical Faculty Survey

For each of the questions in this questionnaire, please circle the number in front of the response you select OR fill in your response in the space provided.

SECTION I: BACKGROUND INFORMATION

1. Sex:

1. Male *2. Female*

2. Age:.......... *years*

3. Please indicate all your degrees:

1. *B.A./B.S.*
2. *M.A./M.S.*
3. *Ph.D. or equivalent*
4. *D.O.*
5. *M.D.*
6. *Other (please specify)* ....

....

4. Certification:

1. *Board certified (please specify)* ....
2. *Board eligible (please specify)* ....
3. *No (please specify type of practice)* ....
4. *No and not applicable (e.g. I teach a basic science.)*

5. Name of institution(s) where you earned your highest degree(s):

....

6. Number of years since you completed your professional training: .... *years*

7. Prior to your coming to this institution, please describe your professional work experience. Circle as many as apply.

1. *Studying for an advanced degree*
2. *Industry*
3. *Private single practice*
4. *Private group practice*
5. *Higher education/teaching and research*
6. *Higher education/administration*
7. *Other (please specify)* ....

....

8. Number of years you have taught undergraduate osteopathic medical students including this year: .... *years.*

9. Which of the following describes your current position:

1. *Full-time college salaried without practice income*
2. *Full-time college salaried with practice income*
3. *Part-time college salaried*
4. *Unpaid volunteer*
5. *Other (please specify)* ....

10. Academic Rank:

1. *Adjunct faculty member*
2. *Professor*
3. *Associate Professor*
4. *Assistant Professor*
5. *Instructor*
6. *Lecturer*
7. *Not applicable*
8. *Other (please specify)* ....

....

11. Administrative title:

1. *Dean*
2. *Department Chairman*
3. *Director of Medical Education*
4. *Not an administrator*
5. *Other (please specify)* ....

12. Academic department in which you hold your primary appointment: ....

....

13. Primary disciplinary area in which you teach:

1. *Clinical science*
2. *Basic science*
3. *Other (please specify)* ....

14. Teaching primarily done in:

1. Hospital(s) (please name) ....

....

2. College (please name) ....

....

3. Private practice ....

....

4. Clinic (please name) ....

....

5. Other (please specify) ....

....

15. Please indicate how often you teach undergraduate osteopathic medical students in each of the following instructional settings. Write the number of your response using the following key.

KEY: *(1)I FREQUENTLY teach in this setting.*
(2)I OCCASIONALLY teach in this setting.
(3)I NEVER teach in this setting

Instructional Setting

[ ] *Classroom/conference room*
[ ] *Office*
[ ] *Laboratory*
[ ] *Patient bedside*
[ ] *Patient examining room*
[ ] *Hospital corridor*
[ ] *Other (please specify)* ....

16. How many weeks per year do you have active teaching responsibilities (designing, implementing, and/or evaluating instruction) for UNDERGRADUATE OSTEOPATHIC MEDICAL STUDENTS?

.... *weeks per year.*

17. How many hours per week do you usually spend teaching? .... *hours per week.*

SECTION II: PREPARATION FOR TEACHING

18. Have you ever taken for credit or audited any formally established university or college course(s) on education/teaching?

1. Yes. *2. No (skip to question 20)*

19. If you answered yes to question 18, please indicate the areas in which you have taken a course and estimate its usefulness in your teaching. Write the number of your response in the space provided using the following key.

KEY: *(1)I TOOK this type of course and consider it USEFUL to my teaching.*
(2)I TOOK this type of course and consider it NOT USEFUL to my teaching.
(3) I have NEVER taken this type of course.

Courses

[ ] *Educational statistics*
[ ] *Educational psychology*
[ ] *Instructional design*
[ ] *Teaching methods*
[ ] *Evaluation/testing*
[ ] *Sociology*
[ ] *Psychology*
[ ] *Other (please specify)* ....

20. Have you ever attended any WORKSHOP(S) OR TRAINING SESSION(S) which dealt specifically with the design, implementation, and/or evaluation of instruction in the health professions?

1. Yes, my attendance was voluntary
2. Yes, my attendance was required.
3. No (skip to question 23)
4. Other (please specify) ....

21. If your answer to question 20 is yes, were you awarded continuing medical education credits for your session participation?

1. Yes *2. No*

22. If your answer to question 20 is yes, please indicate the topic(s) of the workshop or training sessions you have attended and estimate their value for your teaching. Write the number of your response in the space provided using the following key.

KEY: *(1) I have attended a session on this topic and consider it VALUABLE to my teaching.*

(2) I have attended a session on this topic and consider it NOT VALUABLE to my teaching.

(3) I have NEVER attended a session on this topic.

Workshop/Training Session Topics

- [ ] *Instructional/course design*
- [ ] *Lecturing*
- [ ] *Small group discussion*
- [ ] *Alternative teaching strategies*
- [ ] *Laboratory teaching*
- [ ] *Clinical instruction/supervision*
- [ ] *Interpersonal skill development/sensitivity training*
- [ ] *Evaluation of clinical performance*
- [ ] *Simulation techniques*
- [ ] *Development of programmed instruction/self-instructional materials*
- [ ] *Computer-assisted instruction (C.A.I.)*
- [ ] *Use of media in instruction*
- [ ] *Evaluation/testing*
- [ ] *Other (please specify)* ....

23. Please indicate how each of the following sources has contributed to the way you now teach. Write the number of your response in the space provided using the following key.

KEY: *(1) CONTRIBUTED*

(2) HAS NO IMPACT

(3) DETRACTED

(4) DOES NOT APPLY

Sources

- [ ] *The way I was taught*
- [ ] *Books and/or articles I have read*
- [ ] *My own intuition/judgment*
- [ ] *Feedback from colleagues*
- [ ] *Formal and informal feedback from students*
- [ ] *Observation of colleagues' teaching*
- [ ] *Formal training in education*
- [ ] *Workshops on teaching*
- [ ] *Other (please specify)* ....

24. Please briefly describe any additional worthwhile activities/experiences (formal or informal) that have helped you prepare for teaching.

....

....

....

....

....

....

....

....

....

....

SECTION III: CURRENT EDUCATIONAL PRACTICE

25. On the average, how many hours per week do you read professional journals? .... *hours per week.*

26. How often do you read the following publications? Write the number of your response (using the following key) in the space preceding the journal's name.

KEY: *(1) I FREQUENTLY read this publication*

(2) I OCCASIONALLY read this publication.

(3) I NEVER read this publication.

Journals

- [ ] *Journal of the American Osteopathic Association*
- [ ] *The D.O.*
- [ ] *The Journal of Family Medicine*
- [ ] *American Educational Research Journal*
- [ ] *Medical Education (Formerly British Journal of Medical Education)*
- [ ] *Journal of American Medical Association*
- [ ] *Journal of Higher Education*
- [ ] *Journal of Medical Education*
- [ ] *New England Journal of Medicine*
- [ ] *Review of Educational Research*
- [ ] *Osteopathic Annals*
- [ ] *The Osteopathic Physician*
- [ ] *Osteopathic Medicine*
- [ ] *Other (please specify)* ....

27. How often do you use the following educational resources in your teaching of undergraduate osteopathic medical students? Write the number of your response in the space provided using the following key.

KEY: *(1)I FREQUENTLY use this resource.*
(2)I OCCASIONALLY use this resource.
(3)I NEVER use this resource.

Educational Resources

[ ] *Slides*
[ ] *Audio tapes*
[ ] *Audio tapes/slide packages*
[ ] *Overhead transparencies*
[ ] *Motion picture films*
[ ] *Video tapes*
[ ] *Simulations (e.g., patient management problems, pelvic models, simulated patients)*
[ ] *Assigned texts*
[ ] *Reading lists*
[ ] *Handouts*
[ ] *Other (please specify)* . . . .

28. How often do you use each of the following instructional methods in your teaching of undergraduate osteopathic medical students? Write the number of your response in the space provided using the following key.

KEY: *(1)I FREQUENTLY use this method.*
(2)I OCCASIONALLY use this method.
(3)I NEVER use this method.

Instructional Methods

[ ] *Lecture*
[ ] *Mixed lecture-discussion*
[ ] *Small group discussion*
[ ] *Laboratory teaching*
[ ] *Clinical instruction/supervision*
[ ] *Tutorial instruction*
[ ] *Programmed instruction/self-instruction materials*
[ ] *Computer-assisted instruction (C.A.I.)*
[ ] *Other (please specify)* . . . .
. . . .

29. How often do you seek advice/assistance on instructional issues and problems from the sources listed below? Write the number of your response in the space provided using the following key.

KEY: *(1)I FREQUENTLY turn to this source for assistance/advice.*
(2)I OCCASIONALLY turn to this source for assistance/advice.
(3)I NEVER turn to this source for assistance/advice.

Sources of Advice/Assistance

[ ] *Colleagues within my department*
[ ] *Colleagues outside my department*
[ ] *Department Chairperson(s)*
[ ] *Educational Specialist(s)*
[ ] *Assistant/Associate Dean for Education/Academic Affairs*
[ ] *Current students*
[ ] *Former students*
[ ] *The literature*
[ ] *Other (please specify)* . . . .

SECTION IV: PROGRAM PARTICIPATION

30. If the following programs were available, in which would you probably participate? Write the number of your response in the space provided using the following key.

KEY: *(1)I PROBABLY would participate*
(2)I am UNDECIDED.
(3)I PROBABLY would NOT participate.

Programs

[ ] *A clearinghouse to share written materials and information on teaching improvement activities*
[ ] *Conferences for staff members to share teaching experiences and results*
[ ] *Collaborative research on teaching and learning*
[ ] *Observation and critique of my teaching by my peers*
[ ] *Critique of my teaching by my students*
[ ] *A program of self-assessment of my teaching (materials and confidential feedback provided)*
[ ] *Observation of master teachers (live or via video tapes)*
[ ] *Release time to work at improving instructional skills by experimenting with different teaching techniques*
[ ] *Conferences on developing new or redesigning courses*

31. Please indicate whether you believe continuing medical education (C.M.E.) credit should be awarded for each of the following activities using the following key.

KEY: *(1) C.M.E. credit SHOULD be awarded.*
(2) I am UNDECIDED.
(3) C.M.E. credit SHOULD NOT be awarded.

Activities

[ ] *Successful completion of self-study materials on teaching*
[ ] *Successful completion of self-study materials on student evaluation*
[ ] *Attendance at a workshop dealing with instruction and/or instructionally related activities*
[ ] *Participation on a planning evaluation committee on osteopathic medical student instruction.*
[ ] *Attendance at a workshop dealing with osteopathic medical issues.*

32. Please indicate how convenient each of the following formats would be for faculty/instructional skills programs. Write the number of your response in the space provided using the following key.

KEY: *(1) VERY CONVENIENT*
(2) CONVENIENT
(3) INCONVENIENT
(4) It doesn't matter—I'm NOT INTERESTED

Formats

[ ] *On-campus - brown bag lunch*
[ ] *On-campus - half day*
[ ] *On-campus - full day*
[ ] *Off-campus - half day*
[ ] *Off-campus - full day*
[ ] *Hospital - brown bag lunch*
[ ] *Other (please specify)* ....

33. Taking into consideration your response to questions 30-32, which of the following schedules for faculty/staff programs would fit well into your calendar? Choose as many as are appropriate.

1. *Once a week*
2. *Twice a month*
3. *Once a month*
4. *It doesn't matter—I won't participate anyway.*
5. *Other (please specify)* ....

34. Indicate whether you are interested in receiving help with each of the following components of instruction. Write the number of your response in the space provided using the following key.

KEY: *(1) If available, I would like to receive PRINTED INFORMATION.*
(2) If available, I would like to participate in a short WORKSHOP and receive PRINTED INFORMATION.
(3) I am UNDECIDED.
(4) This is NOT an interest.

Components of Instruction

[ ] *Making best use of instructional technology/media*
[ ] *Designing/utilizing computer-assisted instruction (C.A.I.)*
[ ] *Designing individualized instruction*
[ ] *Producing/using self-instructional packages*
[ ] *Producing/using simulations*
[ ] *Formulating educational objectives*
[ ] *Lecturing*
[ ] *Leading small group discussions*
[ ] *Helping a group to function effectively*
[ ] *Helping the reticent student*
[ ] *Explaining so undergraduates understand*
[ ] *Evaluating my own instructional effectiveness*
[ ] *Evaluating program (course) quality*
[ ] *Evaluating student performances*
[ ] *Assessing student's learning styles, characteristics, and needs*
[ ] *Providing individual supervision of students*
[ ] *Teaching professional role behavior*
[ ] *Teaching others the art of diagnosis*
[ ] *Teaching the effective use of information*
[ ] *Training professional problem-solvers*
[ ] *Developing interpersonal skills/sensitivity training*
[ ] *Developing organizational, management, and leadership skills*
[ ] *Learning about professional education (generally)*
[ ] *Other (please specify)* ....

SECTION V: FURTHER COMMENTS

35. Please describe briefly the kinds of institutional support that would most help you improve your teaching.

....

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36. Please identify the institutional constraints regarding implementing a faculty/staff support program to improve teaching at your school or hospital. (List in order of priority)

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37. What do you see as the most important educational issue facing osteopathic medical education? (Please indicate why)

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....

Thank you for your time and effort in completing the questionnaire! If you have any further questions or comments about this questionnaire, we would welcome them.

APPENDIX B

SUPPLEMENTARY DATA TABLES

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
SEX														
Male	100	-	91	88	89	89	91	89	89	88	88	96	80	93
Female	-	100	8	11	8	11	9	9	11	12	12	4	20	7
AGE														
0-40	45	39	100	-	-	58	24	6	42	68	63	38	55	42
41-55	35	44	-	100	-	28	49	53	39	24	36	40	37	36
56+	17	15	-	-	100	14	17	37	18	9	1	22	7	22
HIGHEST DEGREE														
BA/BS	1	2	1	.4	0	1	1	0	0	1	2	1	2	.2
MA/MS	1	7	1	1	0	2	1	0	1	0	5	1	2	.4
Ph.D.	20	53	31	21	11	30	13	30	27	34	7	3	81	2
D.O.	70	34	59	69	80	57	81	64	64	59	80	79	7	90
M.D.	3	3	2	3	4	4	.4	2	3	2	0	7	2	3
Other	5	1	6	6	5	6	4	4	5	4	6	9	6	4
CERTIFICATION														
Certified	45	19	26	53	59	31	61	55	46	33	44	46	5	58
Eligible	11	11	15	7	9	14	6	7	6	16	10	13	2	15
No	15	5	17	7	18	17	9	3	12	12	22	16	1	18
Not applicable	29	65	42	33	14	38	24	35	36	39	24	25	92	9
PROFESSIONAL WORK EXPERIENCE (See Question #7)														
Study	26	25	31	25	14	23	29	21	28	30	31	18	31	24
Industry	5	3	5	7	4	5	6	8	4	5	7	5	8	4
P.P. single	35	17	16	38	63	29	39	36	33	26	34	43	2	44
P.P. group	18	2	14	20	18	15	19	17	21	9	25	21	3	22
Teach/research	31	56	39	31	23	37	27	43	41	39	12	18	69	21
Other	24	32	27	24	14	27	21	18	26	31	22	28	23	24

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
YEARS TEACHING D.O. STUDENTS														
1	20	32	26	15	22	35	-	8	14	30	20	28	20	21
2	12	10	17	11	2	20	-	8	8	19	14	10	21	9
3	10	5	14	7	5	16	-	4	9	14	8	8	15	8
4	9	10	12	7	5	15	-	8	10	9	14	8	13	7
5	8	7	9	7	9	14	-	5	9	9	5	12	5	9
6	6	2	4	7	8	-	14	9	7	4	5	5	7	6
7	3	0	4	3	1	-	7	3	4	2	5	3	1	4
8	4	7	3	7	5	-	12	3	8	3	5	5	5	4
9	1	3	1	1	0	-	3	2	2	1	0	0	1	1
10	6	3	3	3	1	-	8	2	4	2	5	6	1	4
11	2	2	1	4	1	-	5	3	1	3	0	1	2	2
12+	21	19	5	28	43	-	52	46	23	8	19	14	9	25
CURRENT POSITION														
Full-time	49	78	57	50	45	57	44	83	58	66	22	3	89	40
Part-time	17	14	17	16	20	15	19	8	21	15	25	20	9	20
Volunteer	31	8	24	32	35	27	33	8	20	18	47	73	2	37
Other	3	0	2	2	0	1	4	1	1	1	6	4	0	3
ACADEMIC RANK														
Adjunct Faculty	4	2	4	5	6	7	2	-	-	-	-	24	2	5
Professor	19	19	2	23	40	10	32	100	-	-	-	-	22	18
Assoc. Prof.	21	25	20	23	22	18	27	-	100	-	-	-	25	21
Assist. Prof.	31	39	48	21	16	41	17	-	-	100	-	-	44	28
Instructor	9	12	13	9	1	9	9	-	-	-	100	-	3	18
Not applicable	6	0	4	7	4	4	7	-	-	-	-	28	1	6
Other	5	0	4	7	6	5	1	-	-	-	-	21	1	0

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
ADMINISTRATIVE TITLE														
Administrator	34	27	23	44	38	25	46	72	36	20	14	25	25	38
Not administrator	46	58	61	36	32	54	37	22	47	61	64	41	67	41
D.M.E.	4	0	2	3	10	4	4	3	4	2	2	9	1	4
No response	16	15	14	17	20	17	13	3	13	17	20	25	7	17
DISCIPLINARY AREA														
Basic	23	54	32	27	11	32	17	30	31	37	8	8	100	-
Clinical	71	46	64	69	77	61	79	65	66	61	86	79	-	100
Other	6	0	4	4	12	7	4	5	3	2	6	13	-	-
TEACHING SITES														
Classroom:														
frequently	56	75	60	57	53	60	54	70	72	68	24	28	89	46
occasionally	34	19	31	35	28	30	36	24	21	27	59	49	7	42
never	10	6	9	8	19	10	10	6	7	5	7	23	4	14
Office:														
frequently	26	27	27	26	19	24	29	25	24	29	17	26	14	31
occasionally	40	39	45	38	33	40	40	43	47	42	37	27	57	35
never	34	34	28	36	48	36	31	32	29	29	46	47	29	34
Laboratory:														
frequently	22	44	27	24	17	29	16	27	26	32	12	10	60	11
occasionally	17	20	22	17	8	19	16	13	23	25	8	8	30	14
never	61	36	51	59	75	52	68	60	51	43	80	82	10	75
Patient Bedside:														
frequently	34	19	34	35	23	26	43	25	30	31	46	40	0	46
occasionally	20	10	17	21	23	18	22	23	18	15	20	24	2	26
never	46	71	49	44	54	58	35	52	52	54	34	34	98	28
Examining Room:														
frequently	34	14	33	32	29	25	41	24	31	31	39	39	1	45
occasionally	19	14	16	21	17	16	21	22	19	14	20	19	4	23
never	47	72	51	46	54	59	38	54	50	55	41	42	95	32

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
TEACHING SITES														
Hospital Corridor														
frequently	22	8	25	21	11	17	27	13	19	19	32	30	1	30
occasionally	21	17	20	21	23	17	26	26	18	15	31	23	4	28
never	57	75	55	58	66	66	47	61	63	66	37	47	95	42
TAKEN A FORMAL COURSE ON EDUCATION IN														
Educational Statistics:														
useful	11	12	11	11	8	12	8	10	15	12	5	8	16	8
not useful	4	7	6	3	2	4	4	4	3	4	5	5	4	4
never	85	81	83	86	90	84	88	86	82	84	90	87	80	88
Educational Psychology:														
useful	15	25	13	19	17	16	16	27	19	11	14	12	16	15
not useful	4	5	6	2	2	5	3	4	4	5	3	5	8	2
never	81	70	81	79	81	79	81	69	77	84	83	83	76	83
Instructional Design:														
useful	13	15	12	13	15	13	13	18	18	13	7	7	20	10
not useful	2	3	4	1	0	3	2	3	2	3	2	2	4	2
never	85	82	84	86	85	84	85	79	80	84	91	91	76	88
Teaching Methods:														
useful	18	22	17	19	21	18	19	28	19	19	12	13	27	15
not useful	4	3	6	4	2	5	3	4	7	5	0	3	10	2
never	78	75	77	77	77	77	78	68	74	76	88	84	63	83
Evaluation/testing:														
useful	14	24	15	13	14	16	13	18	18	15	8	10	23	11
not useful	3	2	3	3	2	2	3	3	3	2	3	3	2	3
never	83	74	82	84	84	82	84	79	79	83	89	87	75	86

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Sociology:														
useful	10	12	9	11	12	10	10	12	12	9	10	8	8	9
not useful	6	8	9	5	1	7	4	6	4	8	8	3	11	4
never	84	80	82	84	87	83	86	82	84	83	82	89	81	87
Psychology:														
useful	16	22	17	19	14	17	17	22	20	15	15	14	16	16
not useful	5	12	9	4	2	7	5	7	6	8	8	2	12	4
never	79	66	72	77	84	76	78	71	74	77	77	84	72	80
TAKEN A WORKSHOP/ TRAINING SESSION ON:														
Instructional/ course design:														
valuable	32	19	23	38	32	28	37	40	41	25	20	24	33	29
not valuable	2	5	4	3	0	3	2	3	5	1	3	2	5	2
never	66	76	73	59	68	69	61	57	54	74	77	74	62	69
Lecturing:														
valuable	26	15	17	29	37	22	31	38	34	21	10	19	30	23
not valuable	3	7	3	5	0	3	3	4	4	3	2	3	5	3
never	71	78	80	66	63	75	66	58	62	76	88	78	65	74
Small group discussion:														
valuable	26	22	18	31	35	21	34	40	32	20	15	19	27	25
not valuable	3	5	3	3	1	3	3	5	6	2	2	1	3	2
never	71	72	79	67	64	76	63	55	62	78	83	80	70	72
Alternative teaching strategies:														
valuable	13	19	11	17	12	14	13	18	19	13	7	8	19	28
not valuable	4	3	4	5	2	3	5	6	5	4	0	1	8	2
never	83	78	85	78	86	83	82	76	76	83	93	91	73	70
Laboratory teaching:														
valuable	9	14	7	13	5	9	10	15	11	10	2	6	19	6
not valuable	2	0	2	3	1	2	2	3	4	2	2	1	1	2
never	89	86	91	84	94	89	88	82	85	88	96	93	79	92

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Clinical Instruction/Supervision:														
valuable	17	14	11	20	24	12	25	24	22	13	12	15	4	22
not valuable	2	0	2	1	0	2	2	0	4	1	2	1	1	2
never	81	86	87	79	76	86	73	76	74	86	86	84	95	76
Interpersonal skill develop./ sensitivity train:														
valuable	12	12	10	13	13	11	13	18	16	10	7	7	11	11
not valuable	4	2	4	5	0	3	4	3	5	4	2	1	4	3
never	84	86	86	82	87	86	83	79	79	86	90	92	95	86
Evaluation of Clinical Perform:														
valuable	16	12	10	19	22	8	27	25	20	11	8	14	4	20
not valuable	3	0	1	4	3	2	3	2	5	1	2	4	1	3
never	81	88	89	77	75	90	70	73	75	88	90	82	95	77
Simulation Techniques:														
valuable	11	7	3	14	9	10	11	13	15	7	14	8	8	11
not valuable	2	2	1	2	2	1	3	1	4	2	0	1	2	1
never	87	91	96	84	89	89	86	86	81	91	86	91	90	88
Development of Programmed Instruction/self-instructional materials:														
valuable	13	10	10	15	15	11	15	14	21	10	10	8	19	11
not valuable	4	5	4	4	3	3	4	6	5	3	0	2	6	3
never	83	85	86	81	82	86	81	80	74	87	90	90	75	86

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Computer-assisted instruction:														
valuable	6	3	4	9	5	6	7	11	9	4	2	3	10	5
not valuable	2	0	2	2	2	1	3	3	4	1	0	2	2	2
never	92	97	94	89	93	93	90	86	87	95	98	95	88	93
Use of media in instruction:														
valuable	23	17	16	30	20	21	24	34	25	18	15	19	27	21
not valuable	3	0	3	3	2	2	4	3	5	1	3	3	4	2
never	74	83	81	67	78	77	72	63	70	81	82	78	69	77
Evaluation/testing:														
valuable	22	22	16	26	26	20	25	34	32	16	10	14	29	19
not valuable	4	3	2	7	2	3	6	4	6	2	3	6	4	4
never	74	75	82	67	72	77	69	62	62	82	87	80	67	77
SOURCES CONTRIBUTING TO TEACHING PRACTICE														
The way I was taught:														
contributed	87	92	90	85	84	88	86	83	87	91	88	85	82	85
no impact	4	2	4	5	2	5	2	6	3	3	5	5	4	4
detracted	1	2	2	2	1	1	3	3	3	2	3	0	1	2
not apply	8	4	4	8	13	6	9	8	7	4	4	10	13	9
Books/articles read:														
contributed	91	92	90	92	91	90	93	93	91	94	92	86	83	91
no impact	4	5	5	4	2	5	3	3	4	4	7	5	6	3
detracted	0	0	0	0	0	0	0	0	0	0	0	0	0	0
not apply	5	3	5	4	7	5	4	4	5	2	1	9	11	6
My own intuition/judgment:														
contributed	94	97	97	93	89	96	91	90	96	96	92	95	87	93
no impact	4	3	0	2	3	1	2	2	2	0	5	0	1	2
detracted	1	1	1	1	0	1	0	0	1	1	0	0	1	0
not apply	0	0	2	4	8	2	7	8	1	3	3	5	11	5

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Feedback from colleagues:														
contributed	86	93	87	89	77	87	86	84	85	93	92	79	84	85
no impact	6	3	6	4	6	6	4	5	7	4	5	8	4	6
detracted	1	3	0	1	1	0	1	1	1	0	0	0	1	0
not apply	7	1	7	6	16	7	9	10	7	3	3	13	11	9
Formal and informal feedback from students:														
contributed	92	93	95	93	82	93	91	92	91	96	97	85	88	90
no impact	3	4	1	4	5	2	4	3	5	1	2	4	1	4
detracted	0	0	0	0	0	0	0	0	0	0	0	0	0	0
not apply	5	3	4	3	13	5	5	5	4	3	1	11	11	6
Observation of colleagues' teaching:														
contributed	79	88	85	81	66	82	78	79	78	85	92	71	81	77
no impact	10	7	6	11	15	8	12	8	10	10	3	13	7	10
detracted	1	3	2	0	0	1	1	0	3	1	2	0	0	2
not apply	10	2	7	8	19	9	9	13	9	4	3	16	12	11
Formal training in education:														
contributed	32	39	33	34	32	34	32	32	33	32	44	32	26	35
no impact	13	8	13	14	5	10	15	13	18	11	10	7	16	10
detracted	14	3	2	1	1	2	1	0	3	2	2	1	2	1
not apply	41	50	52	51	62	54	52	55	46	55	44	60	56	54
Workshops on teaching:														
contributed	37	46	29	47	41	34	44	55	48	31	27	27	41	35
no impact	9	12	11	10	5	9	11	11	15	8	3	9	9	10
detracted	2	2	2	1	1	2	1	0	1	4	2	0	4	1
not apply	52	40	58	42	53	55	44	34	36	57	68	64	46	54

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
HOURS/WEEK READING JOURNALS														
0-6	63	59	63	61	64	64	61	62	63	58	59	69	59	61
7-12	28	27	30	28	23	28	28	22	29	31	34	25	24	30
12+	9	13	7	11	13	8	11	16	8	11	7	6	17	9
USE OF EDUCATIONAL JOURNALS														
American Educational Research Journal:														
frequently	1	2	1	1	3	1	2	4	1	1	0	1	2	1
occasionally	6	7	6	6	4	6	6	8	4	8	5	4	6	5
never	93	91	93	93	93	93	92	88	95	91	95	95	92	94
Journal of Higher Education:														
frequently	2	2	1	4	0	2	3	6	2	1	0	2	3	1
occasionally	7	10	5	9	8	8	1	15	6	9	2	2	13	4
never	91	88	94	87	92	90	96	79	92	90	98	96	84	95
Journal of Medical Education:														
frequently	9	17	5	12	14	7	3	24	13	5	0	3	14	6
occasionally	11	19	11	14	10	11	7	23	12	13	2	4	24	7
never	80	64	84	74	74	82	90	53	75	82	98	93	62	87
Review of Educational Research:														
frequently	1	2	1	1	1	1	1	1	1	1	0	1	1	1
occasionally	5	5	5	4	5	5	4	5	4	7	2	3	5	4
never	94	93	94	95	94	94	95	94	95	92	98	96	94	95
USE OF EDUCATIONAL RESOURCES														
Slides:														
frequently	60	53	59	58	63	56	63	75	66	63	37	37	61	57
occasionally	24	32	26	28	14	26	23	19	19	27	31	31	26	23
never	16	15	15	14	23	18	14	6	15	10	32	32	13	20

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Audio tapes:														
frequently	17	19	10	23	22	14	21	24	18	14	15	14	7	21
occasionally	36	31	40	37	23	31	43	36	34	42	32	31	34	36
never	47	50	50	40	55	55	36	40	48	44	53	55	59	43
Audio tapes/slide packages:														
frequently	11	17	8	14	15	12	11	18	13	10	10	8	8	13
occasionally	37	34	42	38	20	37	36	35	37	45	27	28	40	34
never	52	49	50	48	65	51	53	47	50	45	63	64	52	62
Overhead transparencies:														
frequently	21	35	26	19	19	22	21	24	28	25	12	11	32	17
occasionally	28	22	31	28	19	26	31	32	28	29	22	25	35	24
never	51	43	43	53	62	52	48	44	44	46	66	64	33	59
Motion picture films:														
frequently	13	19	10	17	14	13	13	13	15	11	12	15	15	12
occasionally	50	47	54	50	41	47	55	61	50	58	36	35	54	48
never	37	34	36	33	45	40	32	26	35	31	52	50	31	40
Video tapes:														
frequently	18	24	16	20	22	17	21	29	23	18	7	11	16	19
occasionally	37	42	41	40	27	38	39	52	34	44	31	24	44	35
never	45	32	43	40	51	45	40	19	43	38	62	65	40	46
Simulations:														
frequently	18	26	16	21	20	17	21	17	22	19	25	14	8	23
occasionally	27	20	29	26	20	24	29	27	21	25	41	25	11	33
never	55	54	55	53	60	59	50	56	57	56	34	61	81	44
Assigned texts:														
frequently	55	51	51	58	50	54	52	69	63	54	29	38	66	48
occasionally	27	7	31	25	20	26	27	18	24	30	41	25	18	29
never	18	42	18	17	30	20	21	13	13	16	20	37	16	22
Reading lists:														
frequently	38	46	36	45	37	39	40	52	45	40	20	30	40	38
occasionally	31	27	36	29	23	31	30	29	29	33	44	23	27	31
never	31	27	28	17	40	30	30	19	26	27	36	47	33	31

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Handouts:														
frequently	56	70	63	55	45	62	49	61	64	67	37	36	73	49
occasionally	26	19	23	29	24	21	31	25	22	20	36	32	13	30
never	18	21	14	16	31	17	20	14	14	13	28	32	14	21
USE OF INSTRUCTIONAL METHODS														
Lecture:														
frequently	77	84	78	80	76	78	78	86	86	78	63	68	87	71
occasionally	15	8	15	14	11	13	16	12	7	17	20	17	3	19
never	8	8	7	6	13	9	6	2	7	5	17	15	9	10
Mixed lecture-discussion:														
frequently	62	53	59	62	62	58	65	63	61	57	58	66	41	68
occasionally	27	29	29	28	19	27	26	29	26	30	29	18	34	22
never	11	22	12	10	19	15	9	8	13	13	13	16	25	10
Small group discussion:														
frequently	55	49	51	60	59	47	67	56	55	53	66	52	32	64
occasionally	30	29	36	29	20	35	23	28	31	34	27	28	38	26
never	15	22	13	11	21	18	10	16	14	13	7	20	30	10
Laboratory teaching:														
frequently	30	56	29	38	25	34	28	41	33	39	19	16	61	19
occasionally	24	14	26	22	18	24	22	23	28	27	17	14	25	22
never	46	30	45	40	57	42	50	36	39	34	64	70	14	59
Clinical instruction/supervision:														
frequently	50	22	44	49	53	38	62	49	41	42	61	57	2	66
occasionally	16	19	16	18	16	16	17	16	15	15	20	19	7	21
never	34	59	40	33	31	46	21	35	44	43	19	24	91	13
Tutorial instruction:														
frequently	23	20	17	31	21	19	29	29	19	23	19	24	21	23
occasionally	32	41	38	29	26	35	29	38	36	42	22	14	47	26
never	45	39	45	40	53	46	42	33	46	35	59	62	32	51

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Programmed instruction/self-instruction materials:														
frequently	5	7	4	7	5	4	8	8	7	4	3	6	4	6
occasionally	26	22	26	30	18	23	30	34	30	28	19	12	30	24
never	69	71	70	63	77	73	62	58	63	68	78	82	66	70
Computer-assisted instruction:														
frequently	1	0	1	1	1	0	2	0	1	0	2	2	0	1
occasionally	5	8	5	6	6	5	6	10	6	6	2	2	6	6
never	94	92	94	93	93	95	92	90	93	94	96	96	94	93
USE OF SOURCES OF ADVICE/ASSISTANCE														
Colleagues within my dept.:														
frequently	56	70	58	55	57	58	55	65	61	56	54	47	62	54
occasionally	33	24	37	32	24	32	33	26	28	37	42	31	34	35
never	11	6	5	13	19	10	12	9	11	7	4	22	4	11
Colleagues outside my dept.:														
frequently	33	31	33	32	38	31	36	38	34	28	44	31	21	37
occasionally	49	56	53	49	41	49	50	50	50	54	44	42	54	47
never	18	13	14	19	21	20	14	12	16	18	12	27	25	16
Dept. Chairperson(s):														
frequently	30	46	29	35	32	32	31	29	33	33	32	31	32	31
occasionally	40	37	47	36	31	40	39	31	39	48	47	31	39	38
never	30	17	24	29	37	28	30	40	28	19	21	38	29	31
Educational Specialist(s):														
frequently	7	8	5	10	8	7	8	10	9	5	7	8	3	10
occasionally	28	22	27	28	27	24	32	35	34	23	20	22	22	28
never	65	70	68	62	65	69	60	55	57	72	73	70	75	62

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Assist/Assoc. Dean for Education/Academic Affairs:														
frequently	7	8	3	11	9	6	10	18	9	5	2	2	5	8
occasionally	33	31	34	31	34	32	34	42	39	33	25	19	32	32
never	60	61	63	58	57	62	56	40	52	62	73	79	63	60
Current students:														
frequently	28	29	27	31	25	28	29	34	32	27	20	25	31	26
occasionally	50	54	59	48	32	51	49	49	46	59	61	38	51	49
never	22	17	14	21	43	21	22	17	22	14	19	37	18	25
Former students:														
frequently	21	24	23	21	14	21	21	24	20	20	19	17	25	19
occasionally	47	39	50	46	41	43	52	54	46	50	54	32	46	46
never	37	37	27	33	45	36	27	22	34	30	27	51	29	35
Literature:														
frequently	53	54	51	56	50	50	57	59	50	52	58	49	42	56
occasionally	29	29	33	26	28	31	26	31	28	33	27	22	29	27
never	18	17	16	18	22	19	17	10	22	15	15	29	29	17
PARTICIPATION IN PROGRAMS														
A clearinghouse to share written materials and information on teaching:														
probably	48	49	42	55	49	47	50	66	50	41	54	38	51	46
undecided	30	32	35	26	23	29	31	20	32	39	25	23	23	32
would not	22	19	23	19	28	24	19	14	18	20	21	39	26	22
Conferences for staff members to share teaching experiences and results:														
probably	64	66	62	67	64	62	68	70	70	66	64	51	64	64
undecided	21	25	26	19	15	22	21	19	20	24	25	19	19	21
would not	15	9	12	14	21	16	11	11	10	10	11	30	17	15

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Collaborative research on teaching experiences and results:														
probably	35	42	33	40	33	35	37	41	36	37	32	31	40	33
undecided	31	32	32	31	30	29	35	29	31	32	41	29	24	33
would not	34	26	35	29	37	36	28	30	33	31	27	40	36	34
Observation and critique of my teaching by my peers:														
probably	71	68	74	72	60	74	66	73	74	76	71	56	74	68
undecided	19	25	18	19	24	16	25	17	20	17	25	25	12	22
would not	10	7	8	9	16	10	9	10	6	7	4	19	14	10
Critique of my teaching by my students:														
probably	76	75	82	73	68	79	71	80	73	71	78	66	74	74
undecided	15	17	13	16	17	13	18	12	16	14	15	19	12	15
would not	9	8	5	10	15	8	11	8	11	5	7	15	14	11
A program of self-assessment of my teaching (materials and confidential feedback provided):														
probably	66	75	68	69	58	66	67	71	70	68	73	52	66	65
undecided	20	19	21	19	20	20	19	15	20	22	17	21	16	20
would not	14	6	11	12	22	14	14	14	10	10	10	17	18	15
Observation of master teachers (live or via tapes):														
probably	58	59	56	62	58	56	62	68	59	58	64	47	51	58
undecided	23	25	28	21	19	25	21	16	25	27	20	24	20	23
would not	19	16	16	17	23	19	17	16	16	15	16	29	29	19

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Release time to work at improving instructional skills by experimenting with different teaching techniques:														
probably	42	44	43	48	30	44	40	45	45	46	44	34	48	40
undecided	28	32	30	28	26	28	30	29	28	31	36	24	18	33
would not	30	24	27	24	44	28	30	26	27	23	20	42	36	27
Conferences on developing new or redesigning courses:														
probably	54	66	52	62	51	54	58	64	61	58	54	39	62	52
undecided	23	15	26	19	19	25	17	19	23	25	25	17	16	24
would not	23	19	22	19	30	21	25	17	16	17	21	44	22	24
INTEREST IN COMPONENTS OF INSTRUCTION														
Making best use of instructional technology/media:														
printed info.	44	37	48	41	41	45	41	39	53	45	34	41	40	44
workshop + info.	27	36	24	33	25	27	29	36	26	30	36	14	32	26
undecided	8	12	9	10	5	8	11	8	9	7	10	12	9	9
not interested	21	15	19	16	29	20	19	17	12	18	20	33	19	21
Designing/utilizing computer-assisted instruction:														
printed info.	21	12	23	21	14	20	21	18	20	21	19	22	16	21
workshop + info.	24	22	24	28	19	25	23	34	26	23	29	13	29	22
undecided	17	22	16	19	22	18	18	14	19	20	14	19	18	17
not interested	38	44	37	32	45	37	38	34	35	36	38	46	37	40

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Designing individualized instruction:														
printed info.	32	19	31	28	35	29	33	27	35	35	19	28	26	31
workshop + info.	22	31	21	29	16	22	24	31	23	19	36	14	25	21
undecided	18	25	21	19	14	22	15	16	17	22	19	20	18	20
not interested	28	25	27	24	35	27	28	26	25	24	26	38	31	28
Producing/using self-instructional packages:														
printed info.	29	19	32	26	23	30	25	24	32	34	22	22	28	27
workshop + info.	20	31	18	27	17	20	23	31	26	18	20	11	28	18
undecided	20	20	18	21	22	20	19	14	16	22	24	24	20	23
not interested	31	30	32	26	38	30	33	31	26	26	34	43	34	68
Formulating educational objectives:														
printed info.	33	36	36	33	27	32	34	35	23	36	29	25	32	32
workshop + info.	37	20	26	28	25	27	26	31	22	24	36	17	25	27
undecided	14	20	15	16	11	16	13	10	22	16	17	19	15	14
Lecturing:														
printed info.	2	36	40	38	33	37	38	34	39	41	32	35	36	37
workshop + info.	28	36	39	40	33	40	36	39	34	45	42	31	36	39
undecided	38	12	9	6	7	8	7	7	11	3	10	10	9	6
not interested	22	16	12	16	38	15	19	20	16	8	16	24	19	18
Leading small group discussions:														
printed info.	33	31	34	34	25	29	37	29	30	35	34	32	28	34
workshop + info.	34	39	35	38	29	36	33	35	40	36	41	25	37	33
undecided	12	12	14	9	14	15	8	10	15	12	8	13	13	12
not interested	21	18	17	19	32	20	22	26	15	17	17	30	22	21
Helping a group to function effectively:														
printed info.	29	22	31	31	18	27	30	25	24	35	25	27	25	30
workshop + info.	27	36	25	31	28	28	29	36	28	27	34	19	30	27
undecided	17	25	18	19	15	18	17	13	22	19	20	15	16	18
not interested	27	17	26	19	39	27	24	26	16	19	21	39	29	25

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Explaining so undergraduates understand:														
printed info.	43	32	43	40	44	43	41	45	39	48	37	35	35	44
workshop + info.	28	31	26	35	23	28	30	27	32	29	37	22	32	27
undecided	9	15	12	8	5	10	9	8	12	6	14	13	8	9
not interested	20	22	19	17	28	19	20	20	56	17	12	30	25	20
Evaluating my own instructional effectiveness:														
printed info.	44	39	46	44	39	45	41	42	42	48	31	42	41	44
workshop + info.	32	42	31	37	31	34	33	39	35	35	39	20	38	31
undecided	7	10	10	5	6	8	7	3	9	5	19	8	4	8
not interested	17	9	13	14	24	13	19	16	14	12	11	30	17	17
Evaluating program (course) quality:														
printed info.	42	34	44	39	42	40	42	37	38	47	37	37	32	43
workshop + info.	33	44	33	38	29	36	32	45	39	34	32	20	45	30
undecided	7	14	10	7	5	9	6	3	9	8	15	9	5	8
not interested	28	8	13	16	24	15	20	15	14	11	16	34	18	19
Evaluating student performances:														
printed info.	41	39	43	40	27	37	45	37	36	47	41	37	33	42
workshop + info.	40	49	40	44	33	44	35	47	42	42	44	30	45	38
undecided	6	8	7	3	7	7	4	3	10	5	3	8	7	5
not interested	14	4	10	13	33	12	16	13	12	6	12	25	15	15
Assessing student's learning styles, characteristics, and needs:														
printed info.	32	32	34	31	32	33	31	29	31	37	31	31	29	32
workshop + info.	28	39	28	33	26	28	32	37	34	29	27	21	33	27
undecided	15	14	16	14	12	16	14	10	18	16	19	14	13	16
not interested	25	15	22	22	30	23	23	24	17	18	23	34	25	25

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instr uctor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Providing individual supervision of students:														
printed info.	34	25	37	33	29	33	34	30	34	35	36	33	26	36
workshop + info.	21	32	23	24	16	22	23	21	22	24	31	19	21	23
undecided	17	14	16	19	15	17	15	17	20	17	12	11	18	15
not interested	28	29	24	24	40	28	28	32	24	24	21	37	35	26
Teaching professional role behavior:														
printed info.	27	27	29	27	28	25	31	26	26	31	19	29	16	31
workshop + info.	21	20	22	23	14	20	22	24	28	19	25	11	15	23
undecided	17	12	16	17	17	18	13	16	13	15	24	17	23	13
not interested	35	41	33	33	41	37	34	34	33	35	32	43	46	33
Teaching others the art of diagnosis:														
printed info.	29	22	30	27	29	26	32	18	31	31	27	33	10	35
workshop + info.	31	17	29	32	31	28	34	34	38	25	51	28	7	40
undecided	9	8	8	10	8	10	7	8	8	8	10	11	12	7
not interested	31	53	33	31	41	36	27	40	33	36	12	28	71	18
Teaching the effective use of information:														
printed info.	38	24	38	35	36	34	39	36	38	38	34	32	27	38
workshop + info.	28	32	26	34	28	27	32	30	32	28	34	23	27	30
undecided	12	19	14	12	10	14	11	10	11	13	19	14	13	12
not interested	22	25	22	19	26	25	18	24	19	21	13	31	33	20
Training professional problem-solvers:														
printed info.	30	29	34	27	23	29	30	28	34	31	32	22	26	29
workshop + info.	25	27	25	29	20	25	26	31	27	23	34	19	25	25
undecided	14	10	14	14	15	14	13	7	13	16	14	17	10	15
not interested	31	34	27	30	42	32	31	34	26	30	20	42	39	31

	Sex		Age			Years Teaching		Rank					Teaching Area	
	M	F	0-40	41-55	56+	0-5	5+	Full Prof	Asso Prof	Asst Prof	Instructor	Other	Basic	Clinical
N =	569	59	282	229	111	381	252	119	137	200	59	118	182	434
Developing inter-personal skills/ sensitivity training:														
printed info.	23	15	23	23	21	21	24	24	21	26	17	19	16	24
workshop + info.	28	39	28	31	23	28	30	34	28	27	34	25	24	30
undecided	15	17	17	14	15	18	11	8	19	16	19	15	16	15
not interested	34	29	32	32	41	33	35	34	32	31	30	41	44	31
Developing organi-zational, manage-ment, and leader-ship skills:														
printed info.	23	15	27	22	19	24	23	24	21	29	19	19	24	23
workshop + info.	28	39	34	42	28	35	36	39	39	35	39	29	34	35
undecided	15	17	10	13	12	12	10	6	13	11	15	14	8	13
not interested	34	27	29	23	41	29	31	31	27	25	27	38	34	29
Learning about pro-fessional education (generally):														
printed info.	37	29	36	38	32	36	36	41	33	40	32	29	35	35
workshop + info.	26	31	22	32	29	24	31	29	28	24	32	25	18	29
undecided	11	14	15	10	7	13	9	4	15	12	19	11	13	11
not interested	26	26	27	20	32	27	24	26	24	24	17	35	34	25

APPENDIX C

LETTERS FROM DEANS TO FACULTY

II-114

Chicago College of Osteopathic Medicine

5200 South Ellis Avenue
Chicago, Illinois 60615

OUR NEW NUMBER IS
(AC 312) 947-4726

Vice President
Medical Education Affairs
Dean of Faculty

To teach, to heal, to serve

Dear Colleague:

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to Tineke Schouten who will send the materials to the Project Director in Washington, D.C.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Very truly yours

RA Kistner

R. A. Kistner, D.O., M.D., F.A.C.O.S.

RAK:tcs

Encl.

COLLEGE OF OSTEOPATHIC MEDICINE AND SURGERY
founded 1898
3200 Grand Ave., Des Moines, Iowa 50312 274-4861 (515)

Office of the Dean

February, 1978

Dear Colleague:

Our institute is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to me.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential, and will be reported in general terms.

Sincerely,

Elizabeth A. Burrows, D.O., F.A.C.O.O.G.
Dean for Academic Affairs, Ad Interim

EAB/dsr

KIRKSVILLE COLLEGE OF OSTEOPATHIC MEDICINE
KIRKSVILLE, MISSOURI 63501

Dear Colleague:

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, DC. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institutional liaison, C. A. Rohweder.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Sincerely,

J. Stookey D.O.

James R. Stookey, D.O.
Vice President for Academic Affairs
and Dean

bh

Enclosure

COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY
NEW JERSEY SCHOOL OF OSTEOPATHIC MEDICINE

University Heights • Box 55
Piscataway, New Jersey 08854 • 201—564-4300

Office of the Dean

February, 1978

Dear Colleague:

Our institution is participating in a Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one year contract funded by the Bureau of Health Manpower, HEW.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty in osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institutional liaison, Dr. Robert L. Thompson.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Sincerely yours,

Benjamin L. Cohen, D.O.
Dean

BLC/LF

NYCOM
nyit

New York College of Osteopathic Medicine
of New York Institute of Technology

II-118

Dear Colleague:

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institutional liaison, Judith Peretz.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Sincerely,

Philip Fleisher D.O. F.ACOI.

Philip F. Fleisher, D.O., F.A.C.O.I.
Dean

PFF:scp

enclosure

Wheatley Road, P.O. Box 170, Old Westbury, L.I., New York 11568 • 516 686-7750

OHIO UNIVERSITY

INTER-OFFICE COMMUNICATION

DATE January 31, 1978

TO OU-COM Colleagues

FROM Frank W. Myers, D.O, Dean Frank W. Myers D.O.

SUBJECT Faculty Assessment Project Questionnaire

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institutional liaison, Sandra Cheldelin Inglis.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Enclosure

THE OKLAHOMA COLLEGE
OF OSTEOPATHIC MEDICINE AND SURGERY

A Member of the Oklahoma State System of Higher Education

February, 1978

Dear Colleague:

Our institution is contributing to the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine. This Project is an effort undertaken by osteopathic medical colleges and the affiliated hospitals to improve the quality of teaching.

Please complete the enclosed questionnaire and return it to my office.

We are assured this data will be confidentially handled and reported only in group categories.

Cordially,

John Barson

John Barson, Ed.D.
President

JB:bam
enclosure

1111 West 17th Street • P. O. Box 2280 • Tulsa, Oklahoma 74101 • 918 / 582-1972

Philadelphia
College of
Osteopathic
Medicine

4150 City Avenue, Philadelphia, Pennsylvania 19131 • (215) TR 8-9400

1978

Dear Faculty Member:

PCOM is participating in the FACULTY ASSESSMENT PROJECT sponsored by the American Association of Colleges of Osteopathic Medicine, Washington, D.C. Ten osteopathic colleges and the affiliated hospitals are cooperating in this effort to further enhance quality teaching. A one-year contract funded by the Bureau of Health Manpower, H.E.W., was awarded to AACOM.

I wish to receive a 100 per cent response, and therefore request that you complete the enclosed questionnaire. The information derived from the questionnaire will be of benefit to the faculty and administration and to osteopathic medicine in general.

Please return the completed questionnaire within the week to my office. I am serving as institutional liaison for this study.

Thank you for your cooperation and time given to this effort to ensure quality osteopathic education. This information will be treated as confidential. All reporting will be done in general terms.

Sincerely,

Robert W. England, D.O.

Robert W. England, D.O.
Dean

Enclosure

RE:de

TCOM
TEXAS COLLEGE OF OSTEOPATHIC MEDICINE • CAMP BOWIE AT MONTGOMERY • FORT WORTH, TEXAS 76107 • 817-731-2741 731-2747
Office of the Dean

Dear Colleague:

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institution liaison, J. Warren Anderson.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Sincerely,

Ralph L Willard

Ralph L. Willard, D.O.
Dean

cc: C. C. Nolen, President
J. W. Anderson, Assistant Dean

Enclosure

II-123

WEST VIRGINIA
SCHOOL
of
OSTEOPATHIC
MEDICINE

400 NORTH LEE STREET
LEWISBURG, WEST VIRGINIA 24901

AREA 304
645-6270

January 17, 1978

Dear Colleague:

Our institution is participating in the Faculty Assessment Project sponsored by the American Association of Colleges of Osteopathic Medicine in Washington, D.C. This Project is an effort undertaken by our institution and nine other osteopathic medical colleges and the affiliated hospitals to lay the groundwork for improving the quality of teaching. It is a one-year contract funded by the Bureau of Health Manpower, H.E.W.

I strongly encourage you to complete the enclosed questionnaire in order to fully document faculty sentiment. The information derived from the questionnaire will be of benefit to the faculty and osteopathic medicine only if a large number of faculty complete the questionnaire.

May I ask that you return the completed questionnaire within the week to our institutional liaison, Bence Boelcskevy.

Thank you for your support and time given to this effort for our colleges to improve teaching. This information will be treated as strictly confidential and will be reported in general terms.

Sincerely,

H. P. K

Harry P. Kornhiser, D.O.
Academic Dean

HPK/jfp

Enclosure

APPENDIX D

LETTER FROM DEAN TO D.M.E.

SUGGESTED LETTER FROM DEAN'S OFFICE TO THE D.M.E. OF THE AFFILIATED HOSPITAL

Dear (D.M.E.'s name):

This correspondence seeks your assistance in the distribution and return of the enclosed survey questionnaires.

Our college is participating in a one-year study to identify the various educational needs of osteopathic medical faculty and the adjunct teaching clinicians. This is a national survey which includes ten osteopathic colleges and their affiliated hospitals and is contracted by the Bureau of Health Manpower to the American Association of Colleges of Osteopathic Medicine.

The data derived from the questionnaire will provide a baseline of information for osteopathic medical education and will assist in the design of support programs to improve clinical teaching. Anonymity of individual respondents will be preserved; no mention will be made in the reports of individuals either by name or by institution.

I am asking you to distribute one survey questionnaire package to each clinician who teaches clinical clerkship students. Once the questionnaires have been returned, please forward them to my office. I am enclosing a transmittal sheet which should accompany the returned questionnaires.

If you have any questions regarding the survey, do not hesitate to call me. Thank you for your help.

Sincerely,

Dean

Enclosures

APPENDIX E

FOLLOW-UP LETTER FROM AACOM

AMERICAN ASSOCIATION OF COLLEGES
OF OSTEOPATHIC MEDICINE

4720 MONTGOMERY LANE, SUITE 609, WASHINGTON, D. C., 20014

301 — 654-5600

MEMORANDUM

TO: Participants, Faculty Survey

FROM: Anthony J. McNevin AJMcN.

SUBJECT: Return of your Completed Form

About two weeks ago you received the Osteopathic Medical Faculty Survey that we are conducting.

If you have already completed and returned your form, please accept our warmest thanks. I hope you found the task interesting and not too burdensome.

If you have not yet completed it, I urge you to please do so now. Should you need an additional copy of the survey material, please contact the liaison to the Project at your institution.* The time required to complete the survey will be repaid with the satisfaction of knowing you contributed to the design of faculty support programs and the identification of a baseline of information on osteopathic medical faculty views and concerns.

Thank you for your participation in this project.

AJM/jab

*College liaison to the Project:
- CCOM - Robert Kistner
- COMS - Elizabeth Burrows
- KCOM - Claus A. Rohweder
- NJSOM - Robert L. Thompson
- NYCOM - Judith Peretz
- OU/COM - Sandra Inglis
- OkCOMS - John Barson
- PCOM - Robert England
- TCOM - J. Warren Anderson
- WVSOM - Benjamin Boelcskevy

Affiliated hospital liaison: Director of Medical Education

APPENDIX F

TRANSMITTAL SHEET FROM PROJECT LIAISON

AMERICAN ASSOCIATION OF COLLEGES OF OSTEOPATHIC MEDICINE

FACULTY ASSESSMENT PROJECT

TRANSMITTAL SHEET

To accompany Osteopathic Medical Faculty Survey

__________ Total received

__________ Total distributed

__________ Total returned, enclosed herewith

____

Project Liaison

AACOM; FA
1978

APPENDIX G

TRANSMITTAL SHEET TO DIRECTOR OF MEDICAL EDUCATION

AMERICAN ASSOCIATION OF COLLEGES OF OSTEOPATHIC MEDICINE

FACULTY ASSESSMENT PROJECT

TRANSMITTAL SHEET

To accompany Osteopathic Medical Faculty Survey

__________ Total received

__________ Total distributed

__________ Total returned, enclosed herewith

____
D.M.E.

D.M.E.'s address:

HRP-0901719

HE 011 686

FACULTY ASSESSMENT PROJECT
FOR COLLEGES OF OSTEOPATHIC MEDICINE

Final Report

Covers Period of Performance
During
September 26, 1977 - October 25, 1978

AUG 17 1979

VOLUME III of 3

Contract No. HRA 231-77-0066

Contractor

American Association of Colleges
of Osteopathic Medicine
4720 Montgomery Lane, Suite 609
Washington, D.C. 20014

Contractor's Project Director: Sylvia L. Sharma, Ph.D.

Sponsor

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Resources Administration
Bureau of Health Manpower
Room 4-22, Center Building
Prince George Center
3700 East-West Highway
Hyattsville, Maryland 20792

Total Price or Estimated Cost of Contract: $100,974.00

VOLUME III:

SELECTED FACULTY DEVELOPMENT RESOURCES AND GUIDANCE MATERIALS

FOR

COLLEGES OF OSTEOPATHIC MEDICINE

Prepared for:
Department of Health, Education, and Welfare
Health Resources Administration
Bureau of Health Manpower
3700 East-West Highway
Hyattsville, Maryland 20782

Sponsored under Contract HRA 231-77-0066
Faculty Assessment Project
American Association of Colleges of
Osteopathic Medicine
4720 Montgomery Lane, Suite 609
Washington, DC 20014

October 1978

VOLUME III: TABLE OF CONTENTS

Page

Volume III: INTRODUCTION 1

UNIT I: A SELECTED AND ANNOTATED BIBLIOGRAPHY ON FACULTY DEVELOPMENT FOR COLLEGES OF OSTEOPATHIC MEDICINE

UNIT I: INTRODUCTION. 3

Faculty Development - General Annotated Bibliography . . 5
Faculty Development - General Unannotated Bibliography . 33
Faculty Development in Medical Education - Annotated Bibliography 53
Faculty Development in Medical Education - Unannotated Bibliography 58

UNIT II: A DIRECTORY OF FACULTY DEVELOPMENT CONSULTANTS

UNIT II: INTRODUCTION 67

Curriculum 69
Evaluation and Testing 72
Faculty Development. 78
Instructional Design 83
Instructional Technology 87
Medical Education. 88
Organizational Development 90
Simulation 93
Teaching Methods 94
Workshops. 96
Other Specialties. 97

UNIT III: AN ASSESSMENT OF PRIVATE AND FEDERAL SOURCES OF FUNDS FOR CONDUCTING FACULTY DEVELOPMENT PROGRAMS

UNIT III: INTRODUCTION. 101

SECTION A: PRIVATE FOUNDATIONS. 103

SECTION A: INTRODUCTION 103

Part 1: Foundation Grants Awarded for Faculty Development or Medical Education, 1974-1977. 105

Table of Contents - continued

Page

Part 2: Foundation Profiles - Major Foundations of National Scope Funding Faculty Development . . . 109

Carnegie Corporation of New York 109
Carnegie Foundation for the Advancement of Teaching. 111
The Commonwealth Fund. 112
The Arthur Vinning David Foundation. 114
Exxon Education Foundation 115
Ford Foundation. 118
Robert Wood Johnson Foundation 119
The Henry J. Kaiser Family Foundation. 121
W.K. Kellogg Foundation. 123
Lilly Endowment, Inc.. 126
Josiah Macy, Jr. Foundation. 127
The Andrew W. Mellon Foundation. 129
The Merck Company Foundation 130

Part 3: Foundations of Local or Restricted Scope Funding Medical Education, by State. 131

Illinois 131
Iowa 133
Missouri 134
New Jersey 135
New York 137
Ohio 142
Oklahoma 144
Pennsylvania 145
Texas. 147
West Virginia. 150

Part 4: Foundation Support for Faculty Development in Colleges of Osteopathic Medicine 151

Prospects for Funding. 156
Preparing a Proposal 158
Contacting the Foundation. 175

Part 5: Bibliography of Foundation Grant Application Guides 185

Part 5: Introduction. 185

SECTION A: SUMMARY 189

Table of Contents - continued

Page

SECTION B: FEDERAL SUPPORT FOR FACULTY DEVELOPMENT IN COLLEGES OF OSTEOPATHIC MEDICINE

SECTION B: INTRODUCTION 190

Locating Support. 191
Establishing Contact. 200
Commitment versus Interest. 202
Improving Proposal Preparation. 204
Timing. 207
Dealing with Unsuccessful Proposals 209

SECTION B: SUMMARY 214

VOLUME III: SUMMARY 216

VOLUME III: INTRODUCTION

The recent and dramatic growth of new osteopathic medical colleges--five new colleges within the last ten years, and two more in the developing stages as of 1978--has uniquely contributed to the profession's involvement in faculty development in at least two ways. First, absorbed by the higher education faculty development upsurge of the 1970's, the new D.O. colleges have either created administrative positions or institutional plans for faculty development as is evidenced at the Michigan, Texas, Ohio, West Virginia, and New York colleges.

Second and concomintant with the establishment of the new colleges has been the shortage of osteopathic academicians. The resulting outcome has been the appointment of osteopathic clinicians and other faculty who lack previous experiences or training in the roles of teachers. The situation relating to the basic science faculty members teaching in osteopathic medical institutions is included in the previous statement. It has been an article of faith among academics that training to conduct research in a basic science field prepares one to teach. Yet, a basic science professor's scholarly competence does not necessarily translate into teaching effectiveness.

Given the need for developing osteopathic medical teaching faculty in the basic and clinical sciences, this report contains the following resource materials and guidelines for faculty development programs in colleges of osteopathic medicine and their affiliated teaching hospitals:

UNIT I: A SELECTED AND ANNOTATED BIBLIOGRAPHY ON FACULTY DEVELOPMENT FOR COLLEGES OF OSTEOPATHIC MEDICINE, is a comprehensive survey of the literature on faculty development in general higher education and medical education.

UNIT II: A DIRECTORY OF FACULTY DEVELOPMENT CONSULTANTS, is a listing of faculty development consultants by skill and by experience in either higher education or medical education or both.

UNIT III: AN ASSESSMENT OF PRIVATE AND FEDERAL SOURCES OF FUNDS FOR CONDUCTING FACULTY DEVELOPMENT PROGRAMS, provides a survey of extramural funding, and identifies procedures for securing such support. The expertise of two consultants was used in the preparation of two components of UNIT III. SECTION A, Part 4: Foundation Support for Faculty Development in Colleges of Osteopathic Medicine: Some Observations and Suggestions, was prepared by Dr. William Bergquist, faculty development consultant and author of A Handbook for Faculty Development, Volumes I and II. SECTION B: FEDERAL SUPPORT FOR FACULTY DEVELOPMENT IN COLLEGES OF OSTEOPATHIC MEDICINE, was prepared by Mr. Donald K. Pollock, Sr., a private consultant familiar with the federal scene for some 20 years.

VOLUME III: SUMMARY is a final statement about the interrelated resource components that comprise this volume.

UNIT 1: A SELECTED AND ANNOTATED BIBLIOGRAPHY ON FACULTY DEVELOPMENT FOR COLLEGES OF OSTEOPATHIC MEDICINE

UNIT I: INTRODUCTION

Faculty development is a broad concept which includes many otherwise diverse areas of concern to teachers, educators, and administrators. The literature on the subject is therefore correspondingly eclectic, and it has been necessary to restrict somewhat the range of specialized topics which are included in this bibliography. Nonetheless, the bibliography prepared for colleges of osteopathic medicine constitutes a comprehensive survey of the literature on faculty development in general, and includes a wide sampling of the literature on more narrow topics as well.

This bibliography is divided into two sections: the first references work on the broader subject of faculty development; the second references work on faculty development in medical education. Major books and articles have been annotated, and may be consulted first by those who are unfamiliar with faculty development. Most of the books and articles in this bibliography cite additional references which may be used to pursue special topics.

A number of sources have been used in the preparation of this bibliography. These include:

Clearinghouse on Higher Education. Bibliography: *Faculty Development*. The George Washington University, Washington, DC, 1977.

Eden, Helen. *Brief Bibliography on Medical Education*. Association of American Medical Colleges, Division of Faculty Development, 1977.

Eden, Helen. *Faculty Development and Evaluation*. Association of American Medical Colleges, Division of Faculty Development, 1975.

Gaff, Sally Shake. "Faculty Development" in Sally S. Gaff (ed) *Resource Notebook*. Project on Institutional Renewal through the Improvement of Teaching, Washington, DC, 1976.

Gaff, Sally Shake. "Faculty Development" in Professional Development: A Guide to Resources. Change Magazine Press, 1977.[1]

The source of annotations is indicated in parentheses following the citation. These are:

(CB): Carole Bland, "Selected Faculty Development References" unpublished draft copy, 1977.

(DFD): Workshop on Faculty Development: An Annotated Bibliography. AAMC, Division of Faculty Development, 1977.

(ERIC): Bibliography: Faculty Development. Clearinghouse on Higher Education, The George Washington University, 1977.

(HE): Helen Eden, Brief Bibliography on Medican Education. AAMC, Division of Faculty Development, 1975.

(SG): Sally Gaff, "Faculty Development" in Professional Development. Change Magazine Press, 1977.

(JA) Journal abstract, with journal specified.

---

[1] Reprinted with permission from Professional Development: A Guide to Resources, J. Gaff, S. Gaff, C. Festa, Change Magazine Press, New Rochelle, New York 1978.

FACULTY DEVELOPMENT

GENERAL ANNOTATED BIBLIOGRAPHY

Aleamoni, L. M., and Yimer, M. "An Investigation of the Relationship Between Colleague Rating, Student Rating, Research Productivity, and Academic Rank in Rating Instructional Effectiveness," _Journal of Educational Psychology_, 64, (1973): 274-277.

Colleague and student ratings were gathered on a group of 477 instructors and then compared to the instructors' research productivity and academic rank. Colleague and student ratings were not found to be significantly related to the instructors' research productivity. However, colleague ratings were significantly related to academic rank indicating that the reputation of the instructors could be influencing colleague rating. (HE)

Alexander, L. T., and Yelon, S. L. _Instructional Development Agencies in Higher Education_, East Lansing: Michigan State University Continuing Education Service, 1972.

Book describes some of the more well-known instructional development and improvement centers in the nation which were established during the 1960's and later. Case study method is employed with 16 agencies, and descriptions are written by those actively involved in centers. Includes activities and programs, administration, budget, and staff, as well as information on consultation services, short courses, and workshops. (CB)

Allen, Dwight W. et al. (eds.) _Reform Renewal Reward_, May be obtained from Clinic to Improve University Teaching, School of Education, University of Massachusetts at Amherst, 1975.

A series of articles based on the Proceedings of the International Conference on Improving University Teaching held at the University of Massachusetts, October 4-8, 1974. This conference did not focus on issues in the health professions; however, the presentations made by national leaders in the field of university faculty development made important contributions which can be of value to the health fields. The Conference was organized around four themes: Stimulating Instructional Improvement through Curriculum Reform, Changing Teacher Behavior to Improve Instruction, Teaching Improvement through Organizational Change, and Use of Media. The presentations were organized into three discussion areas for the purposes of this book: 1) Reform, the need for and barriers to change; 2) Renewal, new roles in teaching and learning; and 3) Reward, institutional support for faculty development. (DFD)

Aspy, David N., and Roebuck, Flora N. "From Humane Ideas to Humane Technology and Back Again Many Times," *Education*, (Winter 1975).

The authors assess in the effect of the teacher's personality on learning growth in the classroom. Do students who receive high levels of empathy, congruence, and positive regard learn more? Can teachers change to give more of these factors to their students? A review of ten years of systematic research suggests that the answer to both questions is, "yes." (HE)

Baldridge, Victor J., and Deal, Terrence E. *Managing Change in Educational Organizations*. Berkeley, California: McCutchan Publishing Corporation, (1975).

This book presents the results of educational research and development projects on the topics of organizational change in educational institutions. The book has three objectives: 1) to broaden perspectives on educational innovation, 2) to study strategies in educational innovation, and 3) to provide case studies of educational innovation. The book is quite readable despite prevalent references to theoretical terms and concepts and can be read selectively by topics. It is particularly useful to administrators who want to integrate the results of individual faculty workshops and training programs into the organizational setting. (DFD)

Basic Reader in Human Relations Training available from the Episcopal Church Service to Dioceses, 815 Second Avenue, New York, NY 10017.

Part IV Planned Change and the Consulting Relationship

Part VI Organizational Development and the Role of the Consultant

Part IV

The first section is a collection of articles which discuss the meaning of consultation and consultant roles. It includes articles on "The Characteristics of a Helping Relationship" by Carl Rogers, "The Helping Process: Consulting" by Weldon Moffitt, and "Some Conditions for an Effective Consultant-Client Relationship." The second edition is concerned with the skills needed for successful consulting (e.g. problem definition, diagnoses, intervention, and evaluation).

Part VI

Four topics are discussed in this publication: 1) the nature of organizations and social systems, 2) the meaning of human conflict, 3) the principles of planned change and their application to organization, and 4) the role of change agent or consultant to organizational development. Also included are some case examples and sample exercises for organizational development labs. (DFD)

Bergquist, William H., and Phillips, Steven R. *A Handbook for Faculty Development*. Council for the Advancement of Small Colleges, Washington, DC. Shell Companies Foundation, New York, NY. (June 1975), 299 p.

Available from: Council for the Advancement of Small Colleges, One Dupont Circle, Washington, DC 20036 (9.95).

Faculty development has become an increasingly prominent concept for a growing number of faculty and administrators in American colleges and universities. To bring about the significant improvements in instruction demanded by the new and difficult issues facing higher education in the 1970's, it is essential that a faculty development program be both comprehensive and based on a set of diverse, though related strategies. Our proposed approach to faculty development is based on the assumption that significant changes must take place at the three levels of attitude, process, and structure. This handbook, designed as a self-contained guide to faculty development, presents both theoretical guidelines and practical suggestions for actually doing faculty development. Next follow sections on instructional, organizational, and personal development. Each of these sections contains separate chapters on such issues as classroom observation and diagnosis, decision-making, and helping skills. Each chapter typically includes an introductory discussion followed by related instruments, handouts, and exercises. A final sections suggests a number of ways colleges and universities can develop and sustain their own faculty development programs. (DFD)

Bergquist, William, and Phillips, Steven, and Quehl, Gary. A Handbook for Faculty Development 2. Berkeley, California 94708: Pacific Soundings Press, 1217 Campus Drive, 1977.

"This volume expands on concepts and practices like course design, life planning, and values clarification that were briefly discussed in the first volume or, like portfolio and program evaluation, not discussed at all. In other chapters, we have updated and expanded such areas as instructional diagnosis and interpersonal skills." "At several points in this second handbook, we have identified specific research projects that should be conducted or conceptual models that need to be filled out on the basis of both field experience and research." (SG)

Bergquist, William H., and Phillips, Steven R. "Components of an Effective Faculty Development Program." Journal of Higher Education XLVI (1975): 177-211.

The authors present a comprehensive approach to faculty development in order to devise new methods of evaluation and diagnosis, and to explore new approaches to the improvement of instruction. They assert that significant changes must take place on three levels: attitude, or the personal level; process, or instructional level; and structure, or organizational level. Each area is explored in detail including evaluation of teaching by the teacher by means of such activities as life planning workshops and interpersonal skills training. The article concludes with a discussion of methods of implementing a faculty development program. An extensive bibliography is included. (DFD)

Birnbaum, R. "Using the Calendar for Faculty Development," Educational Record, (Fall 1975): 226-30.

Chancellor of University of Wisconsin-Oshkosh analyzes time and roles of faculty; details Oshkosh Calendar Plan, designed to change faculty time allocations and provide a more favorable climate for faculty development. Uses modular calendar approaches (2 main semesters each with three modules of 7, 7, and 3 weeks plus a two module summer semester) and describes how faculty vary their teaching and their other professional responsibilities in relation to it. Explains their Faculty Development Program in its four main parts: faculty research, curriculum development, University institutes, and Faculty College. (SG)

Blackburn, Robert T., and Clark, Mary Jo. "An Assessment of Faculty Performance Some Correlates Between Administrator, Colleague, Student and Self-Ratings," Sociology of Education, Vol. 48, (1975): 242-256.

The study examines the uncertainties surrounding the evaluation of faculty work performance and the concerns faculty have regarding assessments made about them. Separate evaluations of teaching effectiveness and overall contributions to the college of full-time faculty members were collected from administrators, peers, students, and self-assessment. A very low correlation was shown between the professor's self-rating and those of administrators, peers, and students. Related research supports a psychological explanation of self-misperceptions. The intercorrelations are also examined for their implications. Suggestions are made for improving the evaluation of faculty performance and for mitigating a professor's uncertainties on vital matters affecting his/her career. (DFD)

Bland, Carole J. "Review of Literature on Faculty Development Through Workshops," Draft. Mimeographed. For Family Practice Medicine seminars, (August 1976), The Society of Teachers of Family Medicine, Department of Family Practice and Community Health, University of Minnesota Medical School. (DFD)

A valuable survey of the literature on workshops, perhaps the most popular technique for "doing" faculty development, by an expert on workshops.

Block, James H., ed. Schools, Society and Mastery Learning, New York, Holt, Rinehart, and Winston, Inc., (1974), 148 p.

This collection of papers describes "...an instructional philosophy and an associated set of ideas about instruction..." necessary for the implementation of these ideas. The readings explain how ".... under appropriate instructional conditions virtually all, rather than some, students can learn most of what they are taught" and what implications follow from this philosophy. "Mastery learning" is an important current educational issue which holds appeal for a growing number of medical educators. This book is the best available general reference on the subject. (CB)

Bloom, Benjamin S., Hastings, J. Thomas, and Medaus, George. Handbook of Formative and Summative Evaluation, New York, McGraw-Hill, (1971), 923 p.

The first few chapters of this book provide a good introduction to criterion-referenced testing, the most important advancement in testing since it was proposed in 1963. Criterion-referenced tests play a central role in both mastery learning and the Keller Plan and probably should be widely used in instructional settings generally. (HE)

Borg, Walter R. "The Minicourse as a Vehicle for Changing Teacher Behavior: A Three-Year Follow-up," *Journal of Educational Psychology* 63: 572-579.

The value of microteaching as a method of improving teaching is illustrated by this article which describes a follow-up designed to measure the behavior of teachers three years after completion of a microteaching course. Results indicate that their performance was still significantly superior to their precourse performance on 8 out of 10 behaviors that were scored. (DFD)

Brown, D. G., and Hanger, S. "Pragmatics of Faculty Self-Development," *Educational Record*, Vol. 56, (Summer 1975): 201-6.

Believes part of professional responsibility of faculty is to energize the institutional community. Hence, faculty self-development must be encouraged. Extensive list of 142 activities that may stimulate self-development and growth on the part of faculty, and strategies for administrators to reinforce and enable such growth. Broad categories include changing environments, altering habit patterns, risking new exposures. Examples of specific activities include taking on a new or different job temporarily, seeking new patterns of interactions, writing, and seeking feedback. (SG)

Bryson, Rebecca. "Teacher Evaluations and Student Learning: A Re-examination," *The Journal of Educational Research*, 68, 1, (September 1974): 12-14.

The study was conducted to re-examine the origin of the relationship between teaching skill as evaluated by college students and teaching skill as evidenced by how much the instructors' students learned. For all evaluation items the relationship with amount learned was positive. These results are in direct conflict with results recently reported by Rodin & Rodin (1972). Reasons for the discrepancies are discussed. (HE)

Buhl, L. C., and Greenfield, A. "Contracting for Professional Development in Academe," *Educational Record*, Vol. 56, (1975): 111-21.

Discusses the advantages of having faculty members and chairpersons make explicit "contracts" that contain provisions for professional and personal growth. Describes procedures to use in applying this approach and indicates how to avoid pitfalls in growth contracting. (SG)

Centra, J. A. *Faculty Development Practices in U.S. Colleges and Universities*, Princeton, New Jersey: Educational Testing Service, (1976).

A national survey of colleges and universities concerning faculty development activities. Contains information about the frequency and effectiveness of various practices, extent to which various kinds of faculty are involved, organization, and funding of programs, and typologies of development practices. It reports that about half of the colleges and universities have a set of activities to aid the development of faculty, that the average age of such programs is a little over two years, and that the faculty members most actively involved are good teachers who want to get better. (SG)

Centra, J. A., ed. *Renewing and Evaluating Teaching*, New Directions for Higher Education, San Francisco: Jossey-Bass, (Spring 1977).

Several articles focus on faculty development, faculty evaluation, and the relationship between the two. Authors providing various perspectives are Patricia Cross, Robert Davis, Robert Kozma, Jon Wergin, and Edward Moomaw, as well as Centra. (SG)

Centra, John A. "Effectiveness of Student Feedback in Modifying College Instruction," *Journal of Educational Psychology*, Vol. 65, #3, (1973): 395-401.

The purpose of this study was to investigate the extent to which college teachers modify their instructional practices after receiving student feedback. Variables included teaching experience, sex, and self-ratings of the instructor, as well as course subject area. A major hypothesis of this study was that student ratings would produce changes in teachers who had rated themselves more favorable than their students had rated them. Results of a regression analysis generally supported this hypothesis. A second conclusion of the study was that additional time, that is more than half of the semester, along with comparative data to help the individual teacher interpret his feedback, also helped produce modest changes in teachers' instructional practices. (HE)

Centra, John A. "Self-Ratings of College Teachers: A Comparison with Student Ratings," *Journal of Educational Measurement*, Vol. 10, #4, (Winter 1973): 287-295.

Discrepancies in ratings were noted between teachers' self-assessments and students' evaluations with, teachers giving themselves higher ratings than those given by their students. The results of the research indicate that teachers need most feedback in the area of student-instructor interaction, course objectives, and the instructor's openness to viewpoints. (HE)

Centra, John A. *Strategies for Improving College Teaching*. Prepared by ERIC Clearinghouse for Higher Education, One Dupont Circle, Washington, DC, (1972), 51 p. (Can be ordered from the Publications Department, American Association for Higher Education, One Dupont Circle, Suite 780, Washington, DC 20036. Price - $2.00).

A most important short report surveying the problem of improvement of college teaching. It includes subjects such as an analysis of the teaching and learning process, and the elements that go into good teaching practices. Techniques for the improvement of teaching are discussed, and include the use of self-analysis, outside teams, peer analysis, audio-video feedback, development programs, topics for workshops, and finally new approaches such as cable TV, computer-assisted instruction and learning kits. (HE)

Cohen, A. M., ed. *Toward a Professional Faculty*. New Directions for Community Colleges, No. 1, San Francisco: Jossey-Bass, (1973).

Collection of articles looking at positive and negative factors associated with the "professionalization" of faculty including in-service training, administrative relationships, pre-service training. Uses campus examples. Argues that faculty are the ones who accept or reject statements of what their institutions do, and who implement institutional goals and purposes. Though book targets the community colleges, it is useful to those in other types of institutions because many issues are the same. (SG)

Cook, Marvin J., and Neville, Richard F. *The Faculty as Teachers: A Perspective on Evaluation*, Report 13, Washington, DC: ERIC Clearinghouse on Higher Education, One Dupont Circle, (1971), 14 p.

This paper examines the problems of measuring and evaluating teacher performance. Evaluation methods currently in use are reviewed, including the use of student questionnaires. The authors specifically consider the relative merits of measurement based on student performance (direct measurement) and measurement based on teaching activities (indirect measurement) as they relate to the evaluation of faculty. (HE)

Costin, F., Greenough, W. T., and Menges, R. J. "Student Ratings of College Teaching: Reliability, Validity, and Usefulness," *Review of Educational Research*, 41, (1971): 511-535.

This frequently quoted comprehensive article summarizes the results of research in the field of student evaluation of teaching. It indicates that students' ratings can provide reliable and valid information on the quality of teaching. The authors do emphasize that student ratings should constitute one dimension in the evaluation of teaching effectiveness, and other obvious factors such as direction of research, development of new courses or improvement of materials and methods in existing courses, department colloquia, guest lecturing in other courses, all should be considered. (HE)

Crow, M. L., Miton, O., Moomaw, W. E., and O'Connell, W. R., Jr. *Faculty Development in Southern Universities*, Atlanta: Southern Regional Education Board, (1976).

Describes several centers for the improvement of teaching that have been recently established at several southern universities. Their structure, program, staff, and methods of operation are discussed. Provides useful models of alternative approaches for other institutions to consider. (SG)

Davis, Larry N., and McCallon, Earl. *Planning, Conducting, and Evaluating Workshops*. Austin, TX: Learning Concepts, (1976).

A thorough and helpful step-by-step handbook for those who are responsible for designing, implementing, and/or evaluating workshops. The book is divided into three parts; the first two being more comprehensive. Part I deals with planning workshops (i.e. assessing needs, specifying objectives, selecting resources, designing learning activities, budgeting, making arrangements, rehearsing and packing). Part II gives valuable advice on conducting workshops (i.e. setting up, setting the learning climate, agreeing on objectives, directing learning activities, and closing). Part III is dedicated to some of the issues of evaluating workshops. The book is accompanied by a "workbook staff packet" which provides a worksheet or set of checklists which may be reproduced without the author's permission. (DFD)

Davis, R. H., Abedor, A. J., and Witt, P. W. F. *Commitment to Excellence: A Case Study of Educational Innovation*, East Lansing, Michigan: Educational Development Program, Michigan State University, (1976).

A case study of one of the early instructional development centers. It describes the structure of the center, outlines the nature of the program, sketches the evolution of unit, discusses examples of innovations it has facilitated, and presents some of the things the staff has learned about this kind of service. (SG)

Doyle, Kenneth O., Jr. *Student Evaluation of Instruction*, Lexington Books, D.C. Heath & Company, Lexington, Massachusetts, (1975).

This book would be most helpful to decision makers who need to have an informed comprehensive view of a very complicated process. Though his principal focus is on student evaluation of teaching effectiveness, the author also considers other sources of information such as teachers self-assessment, peer, and administrative evaluation. It is divided into three parts. The first section, orientation, discusses the total subject of evaluation of teaching and the place of student evaluation in this picture. Types of instrumentation, and the advantages and disadvantages in the use of each are then listed. The second section deals with quality of the evaluation, and the concepts of reliability, presented with citations from the literature to support views expressed. The third part concerns itself with implementation of evaluation, some principles, and an agenda are included. An extensive unannotated bibliography and examples of various types of questionnaires complete this book. (HE)

Doyle, K., and Whiteley, S. "Reply to Rodin and Rodin." Measurement Services Center, University of Minnesota, (November 1972).

By means of a literature review, analysis of the research design, and discussion of the reliability of the statistical analysis, Doyle and Whiteley summarize their conclusions about weaknesses in the article by Rodin & Rodin (1972). They present a six point summary and conclusion. They suggest, "that all of the studies mentioned above including the one by Rodin & Rodin, argue not against the practical utility of student ratings of their instructors but for the *careful* devising and application of student rating scales." (HE)

Eble, K. E. *Career Development of the Effective College Teacher*. Project to Improve College Teaching, Washington, DC: American Association of University Professors and Association of American Colleges, (1971).

Outlines problems, practices, and possibilities of "career development" at various colleges and universities with an attempt to tie in the individual--his needs, aspiration, and expectations at various stages--to goals, concerns, and characteristics of the institutions. Articulates ways of helping faculty during early, middle, and late career stages, and makes specific recommendations of what administrators at all levels can do to support effective teaching and the development process. (SG)

Eble, K. E. *Professors as Teachers*, San Francisco: Jossey-Bass, (1972).

Author directed the Project to Improve College Teaching, Association of American Colleges and the American Association of University Professors, in which he searched the literature, visited many campuses, and attended a variety of conferences to study career development of effective teachers, development of optimum working conditions for effective teaching, as well as recognition and evaluation of teaching. This overview of the professoriate offers recommendations and suggested reforms primarily within existing structures. (SG)

Eble, Kenneth. *The Craft of Teaching*, San Francisco: Jossey-Bass, (1976), 171 p.

Professor Eble's book is useful both to the beginning teacher and the experienced teacher looking for new ideas. He is a skilled writer and expert teacher who regards his profession as a pleasurable activity. He maintains that teaching is not a science but both an art and a craft whose skills can be acquired. His view of teaching is humanistic, and within that framework he discusses specific components of the art of teaching with practical suggestions for their use in the classroom.

His plan for the book is contained in the Introduction:

The present book focuses on teaching itself. The first part of the book provides a short overview of teaching, looking particularly at the assumptions teachers make and at the attitudes and skills they do well to develop. The second part deals with teaching inside and outside the classroom, detailing both common and not-so-common modes of instruction. The third part is concerned with the practical problems and predictable crises of day-to-day teaching. The fourth and final part discusses better ways of preparing teachers in graduate school and stresses the importance of the attitudes and commitments new teachers bring to teaching.

Although this book was written for the general college teacher, the wisdom and perspective offered should be helpful to teachers in the health professions as well. (HE)

Eble, Kenneth E. *The Recognition and Evaluation of Teaching*, Washington, DC, American Association of University Professors, (1971).

This monograph is the first report of the two-year project to improve college teaching. Subjects covered include: recognition of teaching, evaluation and improvement of teaching, student evaluation instruments and procedures, impact of student evaluation and faculty review. The appendix contains detailed accounts of course evaluation procedures at at Princeton University and the University of Washington, and a case study of classroom visitation at Carnegie-Mellon University. There are examples of questionnaires used and also an extensive bibliography. (HE)

Fenker, R. M. "The Evaluation of University Faculty and Administrators, A Case Study," *Journal of Higher Education*, Vol. 46, November/December, (1975): 665-86.

Discusses development of teacher and administrator evaluation questionnaires by Texas Christian University, which were to provide more objective data for promotion and raises, give additional information to reinforce positive behaviors, and make suggestions for areas of improvement. Attempts to make more explicit the decision-making process of rewards, and involves evaluation of teachers and colleagues as well as administrators and professional staff. Illustrates how the process of developing evaluation measures may itself be an example of faculty development. (SG)

Francis, J. B. "How Do We Get There From Here?: Program Design for Faculty Development," *Journal of Higher Education*, Vol. 46, November/December, (1975): 719-32.

Analyzes stages through which attitudes *about* faculty development pass at a given institution. Points out that procedures, programs, and practices should differ depending upon the current attitudinal stage at a specific college. Uses Kurt Lewin's models as the basis for his discussion on human awareness levels, as starting point for development of Consciousness Raising, Focal Awareness, and Subsidiary Awareness stages in a university. Elucidates the pitfalls of incongruence when programs or ideas of an abstract, or practical or diagnostic sort are introduced out of phase with the institutional level of awareness. Specific program elements are included. (SG)

Freedman, M., ed. *Facilitating Faculty Development*. New Directions for Higher Education, San Francisco: Jossey-Bass, (Spring 1973).

This issue of the Jossey-Bass *New Directions* topical sourcebook series emphasizes development of faculty in terms of self-understanding as well as organizational structure and milieu. Includes articles by

Gessner, Peter K. "Evaluation of Instruction," Science, (May 11, 1973): 566-569.

A sophomore class of medical students taking a one semester, basic science course was the subject in this study. Student ratings of teacher effectiveness were correlated with class performance in twenty subject areas on Part 1 of the National Medical Board Examinations are positively related: the higher the student ratings of instruction, the higher the class score relative to a nation wide norm. On the other hand, no significant correlation was found between student ratings and class performance on institutional examinations. This suggested that both student ratings and class performance on National Board Examinations were valid measures of teaching effectiveness. (HE)

Group for Human Development in Higher Education. Faculty Development in a Time of Retrenchment, New Rochelle, New York: Change Magazine, (1974).

The booklet which crystallized national attention on the professional development of faculty. Written clearly and for the general reader, it faces directly the problem of how to find innovative ways to further stimulate quality and excellence in teaching as a performing art, mid-career transitions, need for faculty development, campus programs on teaching, purposes of evaluation. Authors include Alexander Astin, Craig Comstock, David Epperson, Andrew Greeley, Joseph Katz, Joseph Kauffman. Actual program examples are used. (SG)

Hammons, James O. "How Effective are Short-Term Faculty Workshops?" Audiovisual Instruction, 10 (December 1975): 26.

An experienced workshop leader had the rare opportunity of returning six months after completing a workshop in order to evaluate the effects of his efforts. The evaluations at the end of the workshop were excellent, the materials produced by the participants were quite good, and attendance, which was voluntary, was very high. Fewer than 10% of the faculty who participated, however, had made any measurable changes in their teaching behavior. After conducting interviews with the 155 faculty involved, the author lists and discusses eleven recommendations as guidelines for conducting successful workshops. (DFD)

Hartley, Eugene L., and Hogan, Thomas P. "Some Additional Factors in Student Evaluation of Courses," American Educational Research Journal, Vol. IX, No. 2, (Spring 1972): 241-250.

The objective was to change the focus of student evaluation questionnaires from instructor's behavior and course content to the student's estimate of his self-development as a result of the course. Was it possible to identify factors relating to feelings of self-development which were different from factors identified with the traditional type of course evaluation questionnaire? A questionnaire was developed which attempted to accomplish this purpose. Though the results at this time are not definitive, the ideas developed have generated a great deal of interest and additional research. (HE)

Freedman, Nevitt Sanford, John Noonan, Donald Gerth, Joseph Axelrod, Norbert Ralph and others. Chapters deal with a review of changes in faculty life since the 1960's, the role of the professor as artist at teaching, stages of faculty development, institutional approaches to faculty development, faculty development through experimentation, and interinstitutional cooperation. (SG)

Frey, Peter. "Student Ratings of Teaching: Validity of Several Rating Factors," Science, Vol. 18, (October 5, 1973): 83-85.

Frey replicated Rodin & Rodin's basic research design because he had reservations about the technical soundness of the study. The results which he reports differ from Rodin & Rodin. The author then analyzes the reasons for the differences in results. (HE)

Furniss, W. T. "Faculty Development and the Department," ADE Bulletin (Administrators of Departments of English), No. 47, (November 1975): 30-35.

A look at faculty development containing criticisms of many current efforts, even suspicions of what is sometimes done for the purpose of promoting greater effectiveness among faculty. Argues that in the right atmosphere, one that approximates the ideal of a community of scholars, faculty members will develop on their own initiative. Suggest reading in tandem with S. R. Phillips, "What Then is Faculty Development?" a direct response to this article. (SG)

Gaff, J. G. Toward Faculty Renewal, San Francisco: Jossey-Bass, (1975).

Establishes a conceptual framework for approaching instructional improvement including faculty development, instructional development, and organizational development. Describes the focus, purposes, and intellectual bases of each and gives examples of types of activities as well as specific programs illustrative of each concept. Choice, May 1976 says in a review that this book "addresses what institutions can do to help develop their faculties. This is one of the few critical analyses of the various efforts undertaken nationwide to address these two questions."

A faculty development program can only succeed if it obtains the support and participation of the faculty. But can this be accomplished? Jerry Gaff has written a book which addresses itself to this question. It is divided into two parts: the first analyzes three different approaches to instructional improvement, and the second examines in detail how each approach is implemented in specific programs. This book will be helpful to anyone who has the responsibility for designing and implementing a program for faculty development. (SG)

Garrison, Roger H. "A Mini-Manual on In-Service," Community and Junior College Journal 45 (June-July 1975): 18-20.

This is a series of notes and comments about faculty professional development. Following a list of what inservice training should and should not be, the author details the responsibilities of the inservice coordinator, describes how to use a consultant, and notes the necessary commitment of the college administration. (ERIC)

Havelock, Ronald G. *The Change Agent's Guide to Innovation in Education.* Englewood Cliffs: Educational Technology Publications, (1973).

This handbook outlines six stages of planned change which are directly applicable to the planning, implementation, and evaluation phases of workshop design. The stages are: 1) Building a Relationship, 2) Diagnosing the Problem, 3) Acquiring Relevant Resources, 4) Choosing a Solution, 5) Gaining Acceptance, and Stabilizing the Innovation. Each stage is carefully explained and illustrated by practical examples. It also contains three excellent appendices that deal with strategies and tactics of innovation, major information sources in education, and major works on change in education. An annotated bibliography is included. (DFD)

Hodgkinson, H. L. "Adult Development: Implications for Faculty and Administrators," *Educational Record*, Vol. 55, (Fall 1974): 263-74.

Relates theories of adult life cycle to problems and stages in the professional development of teachers and administrators. Uses adult development patterns and concepts of Daniel Levinson, Gail Sheehy, Roger Gould, and others as basic categories. Concepts such as the Dream, the Mentor. "Catch-30," becoming one's own man, middlescence, and restabilization are related to how faculty conceive and actualize themselves in their professional roles, and the conflicts and crises they have at various stages of their career development. The same is done for administrators. (SG)

Hoffman, Charles. *American Historical Association Faculty Development Program: Planning and Implementation.* (December 1975), 13 p. For a related document, see SO 008 927. Paper presented at Annual Meeting of the American Historical Association (Atlanta, Georgia, December, 1975).

The planning and implementation processes of the Long Island Faculty Development Program are described. Originally sponsored by the American Historical Association's Faculty Development Program to improve history instruction, this project includes faculty representatives from four Long Island universities, colleges, and junior colleges. The program plans to achieve maximum impact by selecting teams of five experienced, innovative teachers from each of the four participating institutions. These teams share experiences and resources with teachers from other institutions, acquire new skills, and then return to their home institutions to work as a nucleus for disseminating new teaching approaches among their colleagues. Three basic strategies listed to launch the program include a content focus on historical areas and problems rather than teaching skills per se, a conscious effort to develop the broadest base of support among all levels of personnel and students, and emphasis on the ongoing need to improve teaching. Based on both the successes and mistakes of the program, 17 general and specific lessons that have been learned in the planning and implementation of the program are outlined. (CB)

Invitational Conference on the Changing Tasks and Roles in Higher Education. A Summary Report. Austin College, Sherman, Texas. Southern Regional Education Board, Atlanta, Georgia. Undergraduate Education Reform Project. (March 1976), 102 p.

A conference held at Austin College, focusing on educational change, discussed: 1) changing tasks and college renewal; 2) new role for students; 3) new role for faculty, including the importance of faculty development; 4) the total institutional approach; and 5) the future role of the liberal arts college. An appendix presents Austin College as a case study in college-renewal. (ERIC)

Kapfer, Miriam B., and Della-Piana, Gabriel M. "Educational Technology in the Inservice Education of University Teaching Fellows." Educational Technology (1974): 22-28.

Though this article is not concerned with medical education, it is included to illustrate how the learning which takes place in a workshop can be reinforced. It suggests the types of follow-up activities which can be effectively utilized to assist teachers in the continued improvement of their instruction. (DFD)

Keller, Fred S., and Sherman, J. Gilmour. The Keller Plan Handbook, Menlo Park, N.J., W. A. Benjamin, Inc., (1974), 99 p.

The Keller Plan (also known as "Personalized Instruction") brings together a group of significant educational innovations. It is a well-developed educational philosophy and associated set of instructional procedures covering instructional planning, teaching, and evaluation of student performance. It has been successfully implemented in a substantial number of university courses, and is beginning to be adopted by some medical school instructors.

The attractiveness of the system derives from several sources: it is based on sound psychological theory, it has been thoroughly evaluated (with results indicating that it functions effectively), it has been tried in a wide variety of subject matter areas, its procedures are well-documented, and there is a growing cadre of faculty members experienced in its use. It has the particularly valuable feature of being far more responsive to individual differences among students than is conventional instruction. (HE)

Kemp, Jerrold E. Instructional Design, Belmont, California, Fearon Publishers, $2.25, (1971), 125 p.

This small paperback (103 pages plus appendix) explains how to design, implement, and evaluate an instructional program. The book is divided into three parts. The first part identifies the problem, and lists goals for more effective instruction. It presents an eight step instructional design plan and illustrates it in diagram form to demonstrate the relationship of each step to the other steps. The plan itself is examined in detail in Part Two and a chapter is devoted to an explanation of each step. The third section deals with the mechanics of planning and evaluation of the instructional program. The appendix illustrates the application of the plan to five selected subject areas. A bibliography with references under subject headings completes this practical, useful book.(HE)

Lee, C. B. T. (ed.) Improving College Teaching, Washington, DC, American Council on Education, (1967), 407 p.

This book comments on eight papers prepared for the American Council on Education. The work is essential for those interested in evaluation, particularly Part 4 on "Teaching and Learning," and Part 5 on "The Evaluation of Teaching Performance."(HE)

Lehmann, I. J. "Evaluation of Instruction," In P. L. Dressel and Associates, Evaluation in Higher Education, Boston: Houghton Mifflin, (1961).

The author contends that it is necessary to specify the objectives of instruction before evaluation can take place. Several types of ratings scales are presented and discussed: descriptive, numberical, graphic, forced-choice, or man-to-man; and several methods for evaluating instruction also are presented and discussed: peer ratings, student ratings, and course ratings. Because of the elusive nature of the teaching-learning process, no completely adequate mode of evaluation exists, but there is evidence that properly constructed ratings scales are valuable, especially when the emphasis is placed on improvement of the quality of instruction. The items composing the scales consisted primarily of behaviors observed by students in the classroom setting. Information yielded by Colleague Teacher - Description Scales may be a useful supplement to information derived from students' observations. Taken together, the two sources of information comprise a more comprehensive definition of the roles and behavior of effective teachers.(HE)

Levine, S. Joseph, and Carlson, Nancy A. A Guide for Conducting Effective Workshops at Teacher Training Workshop, Utica, NY, (November 14-16, 1974).

This is a most practical mimeographed guide that provides a wide range of ideas, principles, exercises and examples for planning, implementing and evaluating workshops. The guide is divided into the following thirteen sections: the role of the workshop leader; the workshop environment; creating involvement through groups; conducting group discussions; using reaction sheets; turning a motion picture into a learing experience; teaching with instructional games; designing and using role plays; communicating concepts through simulations; purposeful evaluation; simple ideas that can be implemented; easily modified activities, and workshop planning kit.(DFD)

Lindquist, Jack. "Institutional Services for Teaching Improvement: Combine Your Change Assumptions" in Allen, Dwight et al. (eds.) Reform Renewal Reward, Clinic to Improve University Teaching, School of Education, University of Massachusetts at Amherst, (1975): 227-242.

The author reviews four approaches which are thought to be most effective in changing teaching behavior; the problem solving approach, the social interaction model, the research and development model, and the legitimate authority model. He examines these approaches in detail and includes positive and negative aspects of each. The remainder of the article describes a teaching improvement strategy which incorporates features from each of the four models. It includes diagnosis, help with problem identification, linkage and new information to help develop changes, increase in organizational health, involvement of authorities, implementation supports and more diagnosis.(SG)

Lipsitz, Lawrence, Ed. *Educational Technology*, Vol. 14, No. 6, (June 1974), 64 p.

The entire issue is devoted to domain-referenced testing, the second most important advance in educational testing since 1963. Introductory articles by major thinkers and practitioners in the area describe the philosophy, methodology, and implications of the concept. Domain-referenced testing carries strong implications for admissions testing, classroom testing, and testing in order to certify competence (e.g. board certification).(HE)

Mager, Robert F. *Developing Attitude Toward Learning*, Belmont, California, Fearon Publishers, (1968), 104 p.

This is a how-to-do-it book written in an interesting manner for teachers who enjoy their subject and want their students to share their feelings. The author describes how teachers can recognize favorable or unfavorable student attitudes toward their subject. Mager enumerates three principles which teachers can utilize in order to encourage the development of a more favorable attitude. He offers helpful techniques for improving teaching and a method of evaluating success.(HE)

Mager, Robert F. *Goal Analysis*, Belmont, California, Fearon Publishers, $2.95, (1972), 132 p.

Mager defines goals as abstractions which deal with attitudes, understandings, or appreciations, and he emphasizes that their formulation is critical to the development of meaningful objectives. He spells out the steps by which teachers can identify goals in their instruction and establish the steps to accomplish these goals. Assessment and evaluation are an important part of the process. These procedures permit instructors to say where they are, where they want to go, how they will get there, and how they recognize when they have arrived.(HE)

Mager, Robert F. *Measuring Instructional Intent*, Belmont, California, Fearon Publishers, $3.25, (1975), 159 p.

In his unique informal style, Robert Mager describes and illustrates a procedure that will help the teacher to select or create test items that match his objectives. He can then use the results to evaluate the success of his instruction. The book limits itself to a consideration of a narrow but essential problem in testing; that is, matching the objectives of the course to test items. It does not attempt to deal with test item construction issues such as item difficulty or the structure of multiple-choice or true false items. This book is a necessary beginning and is written with the expectation that further reading about testing will be necessary.(HE)

Martin, T. W., and Betty, K. J. "The Teaching-Research Dilemna: Its Sources in the University Setting," *Journal of Higher Education*, Vol. 40, (1969): 691-703.

Professors are caught in the dilemna of an interpositional role conflict: teach for the university or publish for the profession. The university hires a professor mainly to teach, but retains or promotes him largely on the basis of his scholarship. The authors advocate a separation of research and teaching functions as a way of resolving the inherent role conflict.(HE)

Martin, W. B. "Faculty Development as Human Development," *Liberal Education*, Vol. 61, Washington, DC: Association of American Colleges, (May 1975): 187-96.

A provocative philosophical and theoretical treatment of faculty development. Stresses the need for an adequate theory of faculty development that encompasses a sophisticated understanding of the process of professionalization in historical, social and institutional terms as well as an integrated theory of human development. Faults those efforts which benefit the institution or administration more that the individual, which deal more with process than substance, and which deal more with quantifying and categorizing the teacher-student relationship and less with learner and learning. Suggests faculty serve as exemplars of the educational ideal, as leaders in defining educational tasks, and as leaders of their institutions. (SG)

Maslow, A. H., and Zimmerman, W.. "College Teaching Ability, Scholarly Activity and Personality," *Journal of Educational Psychology*, Vol. 47, (1956): 185-189.

Research carried out at Brooklyn College over a three-year period, 1943-1946, asked: "Is creativeness (research activity in the field, writing) in a college teacher positively or negatively correlated with the goodness of teaching?" Data were collected on 86 teachers. It was concluded that, at least at the Brooklyn College, colleagues tend to equate good teaching with creativeness (.77) and students tend to equate good teaching with good personality (.76). Also, students and faculty agree fairly well who the good teachers are (.69), but their concept of personality is quite different. The faculty concept of personality is relatively independent of all of the other rated traits.(HE)

Mayhew, L. B. "A Tissue Committee for Teaching," *Improving College and University Teaching*, Vol. 15, (1967):5-10

College teaching seems to have exempted itself from any kind of realistic assessment, in contrast to most other professions which have developed means of evaluation (for example, a pathological tissues committee in medicine). Sequentially, the evaluation process consists of formulating broad educational purposes or objectives, specifying them into discreet behavioral terms, seeking appropriate relevant learning experiences, accumulating evidence of successful or unsuccessful demonstration of desired behaviors and, finally, making judgments as to whether or not the broad educational objectives have been achieved.

The four reasonable sources for evidence about teaching effectiveness are the teacher himself, the student, someone who has seen teaching in progress, and demonstrations of behaviors which the teaching was intended to modify.(HE)

McDaniel, E. D., and Feldhusen, J. F. "Relationships Between Faculty Ratings and Indexes of Service and Scholarship." Proceedings of the 78th Annual Convention of the American Psychological Association, Vol. 5, (1970): 619-620

Using a sample of 76 professor and 4,484 students at Purdue University, the authors found that the most effective instructors are those who write no books, and those who limit their roles as paper and article writers to second authorship. Findings indicate no relationship between research activity as indicated by grants received, and instructional effectiveness. Time spent counseling students or supervising laboratories is positively related to instructional effectiveness, while time spent lecturing or in administration is negatively related to instructional effectiveness. With respect to class, the lower are the ratings of instructional effectiveness.(HE)

McKeachie, W. J., and Kulik, J. A. "Effective College Teaching," In Kerlinger, F. (ed), Review of Research in Education, 3, F.E. Peacock, Itasa, Illinois, (1975): 165-209.

A review of the most recent research in three areas affecting teaching effectiveness. The authors consider the major instructional methods which include individualized instruction, and the effectiveness of types of educational technology such as the use of television, teaching machines, and simulation. Aspects of student interaction such as the effects of learning, of class size, and the use of students or graduate assistants as teachers. The authors then consider characteristics of students affecting teaching effectiveness such as student anxiety, their aptitudes, and achievement motivation. Structure, content, and information processing strategies is the third major area considered. This would include feedback to students, the effect of the sequence of instruction, and pass/fail grading. The authors concluded that important progress has been made since 1970, though it has been slow. This is due to the fact that education is a complicated process.(HE)

McKeachie, Wilbert J. Teaching Tips, A Guidebook for the Beginning College Teacher, Lexington, Massachusetts, D.C. Health and Company, (1969), 239 p.

The title of this short paperback is descriptive of its contents. Dr. McKeachie, a highly regarded psychologist and skilled teacher, has written a very practical book which deals with the everyday classroom problems that teachers face. Among the subjects included are: preparing for a course, meeting the class for the first time, teaching methods, (lecture, discussion, laboratory teaching, audio-visual techniques), testing and grading, evaluation of teaching. His suggestions are documented by relevant research and theory. Chapters begin with "tips" and then a serious discussion of the problem follows. Examples of a rating form for measuring student opinion of teaching and course, a checklist of teaching techniques, and an extensive bibliography are included. While the focus is on general college teaching, there are many useful guides for the teacher in the health professions.(CB)

McNeil, J. D., and Popham J. "The Assessment of Teacher Competence," from Travers, Robert M. W., Second Handbook of Research on Teaching, Chapter 7, p. 218.

This is a comprehensive review of research and evaluation strategy involving teacher effectiveness. Teaching performance tests are examined along with commonly employed teacher competency indicators according to various criteria for use in research and evaluation.(HE)

Menges, Robert J. "The New Reporters: Students Rate Instruction," in Pace, Robert C. (ed), Evaluating Learning & Teaching, 59-75.

This is a comprehensive and frequently quoted article which discusses many aspects of students ratings in the evaluation of teaching effectiveness. It quotes extensively from the conclusions of many research articles when discussing such topics as types and construction of ratings instruments; the correlates of student ratings, which would include sources of bias such as student variables, the effect of their age, sex, grade point average, etc. on their way of rating; instructor variables such as age, sex, rank, personality; and the effects of class size on teacher evaluation. The issues of reliability and validity of rating instruments are considered using results from research. The consequences of using student ratings from the viewpoint of students, faculty, and administrators is the final topic considered. The conclusions reached by the author are 1) students can provide reliable observations of classroom events. 2) significant observable components of teaching are identifiable and measurable. 3) systematic information is more useful than unsystematic information. 4) quantitative summaries are more likely to be useful than raw data or qualitative summary. 5) student ratings are only one source of date on teaching effectiveness. The appropriate content and usefulness of ratings differs by the use to which they are put, such as teaching improvement, administrative decision-making or student information, and the intended audience - the ratee, administrator, student body, legislator, public. The author concludes the article with the observations that "even without additional research, the use of student ratings as part of the faculty evaluation process is clearly justified."(HE)

Miller, Richard I. Developing Programs for Faculty Evaluation, Jossey-Bass, San Francisco, (1974).

Many universities have tried systems of faculty evaluation and abandoned them. Why? The author analyzes causes of failure and presents positive strategies for developing successful faculty evaluation programs. Most evaluation systems failed because of inadequate planning, poor programs, lack of involvement of key faculty, casual procedures for administering the evaluation instrument, inconsistent procedures for returning the instrument, slow processing time, confusion about who received the results, application of the results solely for promotion and tenure decisions, and excessive costs in time and money. This book is a practical resource for the development and maintenance of a faculty evaluation system, designed for those who are considering a new system, or those who want to modify or reappraise an existing system of faculty evaluation. An extensive annotated bibliography is included.(HE)

Miller, Richard I. Evaluating Faculty Performance, Jossey-Bass, San Francisco, (1972)

The author presents an overall system for faculty evaluation which he stresses should be adapted and not adopted. Nine areas for evaluation are proposed: advising, classroom teaching, faculty service and relations, administration, performing and visual arts, professional status and activities, publications, public service, and research. Special attention is given to classroom teaching, the pivotal areas, and five procedures for evaluating are discussed: student evaluation, classroom visitation, teaching materials and procedures, special incident, and self-evaluation. Apendices include the North Carolina State computer experience with student evaluation and the research on the Student Appraisal of Instruction form given in the book. An extensive, selective, and annotated bibliography is included.(CB)

Miller, W. S., and Wilson, K. M. Faculty Development Procedure in Small Colleges, Research monograph No. 5, Atlanta: Southern Regional Education Board, (1963).

This data based study of 228 small colleges describes faculty development procedures related to teaching effectiveness and professional growth. This was an early study, done prior to the more recent surge of interest and includes program descriptions in sample institutions.(SG)

Milton, Ohmer, and Edgerly, John W. The Testing and Grading of Students, New Rochelle, NY, Change Publications, (1976), 62 p.

Since the contents of tests help to determine what students try to learn, and the assignment of grades will affect their lives and careers, the authors advocate the use of the fairest approaches available for writing tests and grading students. The evidence is that this is seldom achieved. It has been estimated, for example, that the average reliability of college tests is .45 reflecting insufficient reliability, inconsistency, and imprecision (a perfect coefficient of reliability is 1.00). Topics include: the use of student evaluation for feedback and improved learning as well as for grading, the use of criterion-referenced grading to emphasize mastery of subject matter and attainment of objectives, principles involved in writing test questions, the advantages and disadvantages of objective tests and essay tests, and the rise of consumerism which has led to increased accountability of faculty to their students.(SG)

Musella, Donald & Rusch, Reubin. "Student Opinion on College Teaching," *Improving College and University Teaching*, Vol. 16, (1968): 137-140.

The purpose of the study conducted at the State University of New York in Albany was to obtain student opinion concerning teacher behaviors that promote thinking, teacher behavior characteristics associated with effective teaching in general, and teacher behaviors and characteristics associated with effective teaching with respect to specific academic fields. Analysis of the student questionnaires returned indicated that the teaching behaviors which most promote thinking in order of importance, were: attitudes toward subject, attitudes toward students, effective use of questions, speaking ability, knowledge of subject, organization of subject matter, extensive and effective use of discussion. Expert knowledge of subject matter was chosen frequently by students as an important characteristic associated with effective teaching in general. In the physical and biosciences, the teachers' systematic organization of subject matter and ability to explain clearly were considered most important by students.(HE)

O'Banion, T. "Staff Development: A New Priority for the Seventies," *The College Board Review*, No. 99, (Spring 1976): 26-33.

Several rationales are suggested in this article for Staff Development programs and approaches used by various community colleges. Though article speaks to goals and purposes of the community colleges, faculty and staff needs for updating in their disciplines and in education, staying attuned to the philosophy and commitment of the institution, having an appreciation and understanding of students and the changing nature of the student population, growing personally, professionally, and individually, all seem to be consonant with needs in any *educational* institution. Views staff development as an instrument of institutional change and offers examples where this has occurred. Articulates six approaches: retreats, interpersonal relations, personal renewal, instructional improvement, curriculum or staff institute, staff development with organizational development.(SG)

O'Banion, T. *Teachers for Tomorrow: Staff Development in the Community-Junior Colleges*, Tucson: University of Arizona Press, (1973)

Again, though oriented to community colleges, the ideas are applicable in a variety of institutions. Describes a need for massive support for staff development programs, and outlines major efforts in preservice and in-service program planning as well as suggestions to meet diverse staff needs. An earlier work with similar thrust to the above entry, but different institutional examples.(SG)

Osterman, Dean N., and Others. Improving Undergraduate Teaching Through a Faculty Development Program, (April 1976), 11 p.

The CAUT (College and University Teaching) Project, was designed to create activities to enable faculty members at Oregon State University to design and implement a systematic instructional process. The CAUT Project uses a full year program with four phases of inservice activities for faculty members: workshops, a planning period, a meterials and teaching stratgies development period, and a one- or two-day evaluation. As a result of the CAUT project a teaching/learning experience in a business course in data processing was developed which used competency-based testing as a beginning step in developing self-paced instruction. This method stimulated improved student satisfaction and higher average grades. In addition, the average level of student competency increased, the proportion of student completing the course increased, and student evaluation of the teaching effort was highter.(ERIC)

Pace, Robert C. (ed) Evaluating Learning and Teaching. Jossey-Bass, San Francisco, (1973).

A group of experts in the field explores the complexity of the teaching-learning process; its more important aspects, various ways of viewing it, and relationships and interactions about which one should be aware and alert.

Articles of particular interest include: "Common and Uncommon Models for Evaluating Teaching," by Leonard Baird, pg. 77. "The New Reporters: Students Rate Instruction" by Robert Menges, pg. 49. (See annotation, Menges) (HE)

Pambookian, H. S. "Initial Level of Student Evaluation of Instruction as a Source of Influence on Instructor Change After Feedback," Journal of Educational Psychology, Vol. 66, (1974): 52-26.

In early October, students responded to a student opinion questionnaire containing measures of seven stable dimensions in teaching. Ten days later, instructors received feedback. In December, the students responded again to the student opinion questionnaire. The students' initial evaluation of instruction was found to be a significant source of influence on instructor change after feedback. Instructors who were evaluated moderately well improved their teaching signigicantly on skill, interaction, and rapport when compared to instructors rated more favorably. They showed trend toward decreasing work overload and improving rapport when compared to instructors rated more unfavorably.(HE)

Pfeiffer, J. Williams and Jones, John E., eds. A Handbook of Structured Experience for Human Relations Training Volume I, II, III, IV, V. La Jolla, California: University Associates, $5.00 per volume.

Five volumes of nonoverlapping, easy-to-use structured group activities, designed for use in planning, trust building, cooperation, consensus, getting acquainted, group problem solving, leadership, competition, and intergroup communication. There are a total of 122 structured experiences in the five volumes, with no overlapping content.(DFD)

Pfeiffer, J. William, and Jones, John E., eds. *The Annual Handbook for Group Facilitators*, La Jolla, California: University Associates, $18.50 per volume, (1972, 1973, 1974, 1975, 1976).

Designed as convenient, practical, and current collections of materials for group leaders, the *Annuals* contain nonoverlapping materials: structured experiences for a variety of situations, instruments, lecturettes, theory and practice papers, resources, bibliographies, and book reviews. Their value is greatest as a resource for those involved in human relations activities. Authored by and for prominent professionals and facilitators in the human relations training field, materials in the *Annuals* are purposely practical in orientation.(HE)

Phillips, S. R. "What, Then, Is Faculty Development?," *ADE Bulletin*, (Administrators of Departments of English), No. 49, (May 1976): 11-17.

A rejoinder to the Furniss article. This article clarifies many misconceptions people have about this effort. Indicates how colleges and universities may establish programs to stimulate and facilitiate the full development of faculty members. Argues that these positive thrust, not a retreat into the past, represent the most promising way to meet the future needs of faculty members and of institutions. A reply by Furniss is made also. Should be read in tandem with Furniss' "Faculty Development and the Department."(SG)

Renner, R. R. "A Successful Rating Scale," *Improving College and University Teaching*, Vol. 15, (1967): 12-14.

Students, as the ultimate consumers of the teacher's efforts know best whether he has been effective or not. The are not trained judges of the suitability of their mentor's methods, but they do judge whether or not the course had value for them. Althought their reactions are not the only index of teacher competence, they appear to be most sharply focused on teaching itself, both its content and process. A college administrator usually evaluates teaching largely on the basis of casual reports from students and faculty members. With these factors in mind, a faculty-approved rating scale was devised, and is included.(HE)

Rodin, M., and Rodin, B. "Student Evaluation of Teachers," *Science*: 177:1164-1166, (1972).

The authors enunciate a viewpoint that "students rate most highly instructors from whom they learn least." This viewpoint has been disputed by other authors. See articles by Bryson, 1974, Frey, 1973, Rippey, 1974, and Doyle & Whitely, 1972.(HE)

Rogers, Carl R. *Freedom to Learn*, Columbus, Ohio, Charles E. Merrill Publishing Company, (1969), 358 p.

For many years, Carl Rogers, through his books, articles, and presentations has been making significant contributions to the improvement of "helping relationships" and personal development. In *Freedom to*

Learn he applies his views to the field of education. He presents his concept of the elements which constitute real learning and explains how the teacher can create a climate for facilitating this learning. He presents his philosophy of education, and gives concrete illustrations of this philosophy at work in the classroom. The findings indicate that students who participate in classes which use Rogers' methods are more productive and do as well on objective tests as those taught by more conventional methods. His thoughts on "Current Assumptions in Graduate Education: A Passionate Statement" deserve reading and rereading by educators. Although not directed at medical or other health professions education, Rogers' concern for an educational process that is more humane, as well as more effective, is very germane to these fields.(HE)

Sample, S. B. "Inherent Conflict Between Research and Education," *Educational Record*, Vol. 53, (1972): 17-22.

According to the author, most major universities refused to face the conflict between research and education, either claiming that the two are equally important or publicly supporting education while privately favoring research. "The most unfortunate aspect of the conflict between research and education, is that, left unresolved, it pits the professor against the student in a contest difficult for either to win. The faculty member assumes that research is the principal goal and therefore views most of his student contacts as potential threats to his professional aspirations. The student on the other hand, thinks development of his mind and intellect should be the central concern of the university and feels cheated upon finding that most professors do not share this concern.:(CB)

Schein, Edgar H. *Process Consultation: Its Role in Organization Development.* Addison-Wesley Series on Organization Development, edited by Edgar Schein, Warren Bennis, and Richard Beckhard, 6733. Reading, Massachusetts: Addison-Wesley Publishing Company, (1969).

This paperback book presents a good, concise summary of social psychology as it relates to the role of organizational and group consultation. While it was written for individuals serving as external consultants, the concepts and practical guides are applicable to those who work within an organization to bring about change. Viewing workshop responsibilities as a form of internal consultation, this book is particularly useful for understanding the planning and design of workshops and the relationship of the workshop leader to the participants.(DFD)

Sikes, W., and Barrett, L. *Case Studies on Faculty Development*, Washington, DC: Council for the Advancement of Small Colleges, (1977).

Booklet describes and analyzes four model colleges, chosen from 40 participating institutions, in terms of development of faculty teams, and articulates successes and problems encountered.(SG)

Simerly, Robert. Faculty Development: *Planning for the Effective Use of Human Resources*. (July 1976): 20 p. Paper presented at the annual convention of the Society for College and University Planning (Washington, DC; July 1976).

Examined is the phenomenon of the recent faculty development movements in institutions of higher education. Of special importance are: 1) major ways we have approached faculty development; 2) forces that influence the faculty development movement. A construct of faculty development involves giving conscious attention to planning, studying, and improving those structures and processes used by faculty to attain their goals as well as the goals of the institution.(CB)

Simpson, R., and Seidman, J. M. *Student Evaluation of Teaching and Learning*. American Association of Colleges of Teacher Education, (1962).

An annotated bibliography plus lists of questions which could be used in formulating a teacher self-evaluation scale.(HE)

Simpson, Ray H. *Teacher Self-Evaluation*. New York: MacMillan Company, (1966)

A paperback book (100 pages) which covers a variety of topics including: the need for self-evaluation, procedures and tools for systematic self-diagnosis and self-improvement, personal goal setting and self-evaluation, and interpersonal relations with colleagues. Numerous self-evaluation instruments, items and formats are also presented.(DFD)

Slobin, Dan Y., and Nichols, David G. "Student Rating Teaching," *Improving College and University Teaching*, Vol. 17, (1969): 244-248.

Student rating of teaching commonly has met opposition and hostility from faculty and yet after a few years experience most faculties have come to accept it and even praise it. In this article, the authors voiced certain typical objections to student evaluations and then refuted each objection with a review of the results of past studies in the area of student ratings of instruction.(HE)

Slotnick, Henry B., and White, Kay S. "Evaluation of a Workshop in Test Construction." Mimeographed. Washington, DC: Association of American Medical Colleges, (1976).

This evaluation report describes the methods and results used to determine 1) the success of a workshop teaching achievement test construction procedures, 2) probable causes of failures identified, and 3) how the failures identified might be overcome in future workshops. The techniques used are criterion referenced, and the report demonstrates their use and provides examples of how the results obtained can be used.(DFD)

Smith, A. B. *Faculty Development and Evaluation in Higher Education*, ERIC/Education Research Report No. 8, American Association for Higher Education. (1977)

Reviews the state of the art in faculty development and faculty evaluation while emphasizing new concepts and alternative approaches. Describes selected development and evaluation programs, cites commonalities between these two areas and argues that they should be more closely related. Growth contracts are regarded as a promising mechanism to merge evaluation and development. (SG)

Sockloff, Alan L., Editor, Proceedings: Faculty Effectiveness as Evaluated by Students, Measurement and Research Center, Temple University, Philadelphia, Pennsylvania 19122 (can be ordered directly from the University), (1974), 252 p.

This invitational conference was held in Philadelphia April 25-27, 1973. It concentrated on five broad areas of student evaluation of teaching effectiveness and twelve papers were presented. They ranged from theoretical considerations to actual examples of student evaluation forms. The authors are well-known authorities in the field, and their comments are valuable. (HE)

Soulier, J. Steven. A Description of a Conceptual Model of Institutional Renewal. (April 1976), 8 p. Paper presented at the Annual Meeting of the Association for Educational Communications and Technology (Anaheim, March 28-April 2, 1976).

The Instructional Development Division of Utah State University has developed a conceptual model of institutional renewal. The model assumes that a program based on effective and systematic interaction of all parts of an institution will be successful and that any model of self-renewal must be eclectic rather than dogmatic. A further assumption is that renewal should strike at the basic unit of the institution, in this case, the academic department. The model has five stages. The first is designed to create awareness among faculty members about innovations and strategies for improvement by disseminating literature, conducting seminars, and using video recorders. Stage two supports faculty initiative by defering competitive grants for improvement of instruction. Faculty development is the third stage which is supported by instructional development grants. Entire departments work on department development as the fourth stage. The final stage is a maintenance stage wherein consultation help is offered to maintain personal development projects. (ERIC)

Student American Medical Association, February 1974. The Conference as a Tool for Change. Edited by Jerry Royer and Jo Boufford. Philadelphia, Pennsylvania: Wm. F. Fell Co., (1974).

This handbook examines the planning, implementation, evaluation, and usefulness of conferences in the process of facilitating organizational change. Although the focus is on conferences rather than workshops, and therefore more on decision-making than on skill-acquisition for participants, most of the principles and practices cited are equally relevant to the workshop planner. (DFD)

Toombs, W. "A Three Dimensional View of Faculty Development," Journal of Higher Education, Vol. 46, No. 6, (November/December 1975): 701-17.

Advocates planning for faculty development within a comprehensive, programmatic framework addressing both practical and conceptual issues. Proposes to look at faculty development through three dimensions: the professional, curricular, and institutional. From these dimensions emerge principles for planning and a programming matrix.(SG)

Wallace, Terry H. Smith. "Provision for Community College Faculty Development in Collective Bargaining Agreements." Research in Higher Education 4 (1976): 381-92.

Trends of collective negotiations were examined as they affect inservice education, through an examination of collective bargaining agreements. Conclusion: the trend is presently one of negotiation of provisions in a piece-meal fashion rather than one with the goal of establishing comprehensive professional improvement programs.(ERIC)

Wergin, J. F., Mason, E. J., and Munson, P. J. "The Practice of Faculty Development: An Experience-Derived Model," Journal of Higher Education, VOl. 47, (1976): 289-308.

Virginia Commonwealth University faculty development activities are described and contribute to a model which is formulated. This suggests that those involved in faculty development need to move from a "professional-expert" phase to a "personal-collaborator" phase.(ERIC)

Wilson, Robert C., Dienst, E. R., and Watson, N. L. "Characteristics of Effective College Teachers as Perceived by Their Colleagues," Journal of Educational Measurement, Vol. 10, (1973): 31-37.

The purpose of the research was to study the dimensions faculty members associate with being a good teacher. 119 faculty members describe the most effective and the least effective teacher they knew using a set of 67 statements. A principal-component analysis of the descriptions of effective teachers produced five factors: research activity and recognition, participation in the academic community, intellectual breadth, relations with students, and concern for teaching. Only research activity and recognition were significantly related to the academic rank and discipline of teachers nominated as effective. Rank, discipline, age and length of teaching experience of the nominator were unrelated to their descriptions of effective teachers. However, faculty with heavier teaching loads were more likely to assign high scores on concern for teaching and low scores on research activity and recognition to the teacher they nominated as effector. Most of the items chosen by colleagues as important described non-classroom behavior and are inferentially or indirectly related to classroom behavior. In a study of student descriptions of effective teachers that was conducted at the same time as the colleague study, scales describing a different set of behaviors were obtained: conceptual approach, classroom interaction, presentation clarity, individualism and dynamism. Though the two groups differed in the characteristics of effective teachers, they did agree on who was effective and who was ineffective on their own particular campus.(HE)

Wilson, Robert C., Gaff, J., Dienst, E. R., and James, B. College Professors and Their Impact on Students, John Wiley & Sons, NY, (1975), 200 p.

The general research question was: "What are the ways which different kinds of faculty members influence or fail to influence different kinds of students?" To answer this question two studies were undertaken using data from 1,000 faculty members at six colleges and universities. The data from the first study entitled, "Faculty Views of Teaching," provided many interesting findings about the characteristics of college and university teachers - their attitudes, their values, activities, and teaching practices. The study revealed insights and perspectives about such issues as faculty accessibility to students, and support or resistance to academic change. The second study drew on the results of the first and included information from both faculty and students at eight colleges and universities. It is entitled, "Faculty Impact on Students." Among the topics explored in this study are the characteristics of effective teachers, academic experiences and changes of students having different patterns of interests, qualities of potent faculty-student relationships, factors associated with intellectual development of students, effects of out-of-class interaction for students and faculty, factors associated with the intellectual development of students, and the effects of college settings on both teaching and learning. To increase the usefulness of this book the authors included examples and suggestions for the improvement of teaching and learning.(HE)

FACULTY DEVELOPMENT - GENERAL

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Barrows, Howard S.; and Others. "Preparing Faculty for Innovative Educational Roles." Journal of Medical Education 51 (July 1976): 592-94.

Describes and evaluates nine 3-day faculty education workshops designed to assist in developing skills for training and use of simulated patients. Conclusion: active participation in developing and using a new skill with immediate feedback from peers and students is effective for refreshing or developing educational skills of health professional faculty.

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The article describes the efforts of the faculty members in the Department of Community Medicine at the Rockford School of Medicine to improve their clinical teaching skills in the Primary Care Experience (formerly the Basic Ambulatory Experience). Faculty members opted for an instructional development program under the direction of an educational consultant as a result of their problems with clinical teaching in a new medical school. Each faculty member's teaching was videotaped and analyzed by the consultant, who met with the instructor to discuss the videotape. From this initial discussion problem areas were defined to be discussed at large group meetings. Faculty members will be videotaped in the present academic year to ascertain improvement in their clinical teaching. (J.M.E. Abstract)

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A WHO publication which review old and new procedures for medical student evaluation, with emphasis on recent advances in examination techniques. The new techniques include approaches for: enhancing motivation, stimulating learning, increasing exam reliability, and shortening time needed to correct examinations. The authors investigate the possibility of the use of standard tests which can be used worldwide to compare the results of various types of medical education.

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The paper presents basic guidelines to provide a framework for short-term teacher-training programs (one to six weeks duration) and to discuss principles of planning and design to help insure their success. The article focuses on the selection of staff and their training in addition to principles to be considered in planning the content of the workshops. It concluded with seven guidelines to be considered when planning learning units. They are: (1) Provide a reason to learn which relates the knowledge to be learned to the teacher's "real world"; (2) Demonstrate the knowledge or skill to be learned. The teacher should understand that he will be able to do what he has learned; (3) Provide opportunities to practice with supervision; (4) Provide time for the teacher to digest the experience. Encourage feedback; (5) Provide opportunities to teach the newly acquired knowledge or skill; (6) Provide opportunities to further reflect upon, digest, and integrate the learning; and (7) Provide opportunities to use the knowledge or skill learned in new ways.

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This is probably the first systematic, analytic, observational analysis of medical school teaching. A total of 380 different instructors at 7 different kinds of medical schools were directly observed, with data recorded on the "Medical Instruction Observation Record," which focuses attention on the teachers: 1) Attitude to Difference (among the students, and from the instructor), 2) Sensitivity to the Physical Setting, 3) Attitude to Students (from friendly to antagonistic), 4) Use of Instructional Materials, 5) Reaction to Students' Needs, 6) Use of Teaching Methods, and 7) Use of "Challenge." Significant differences among schools, settings, departments, and teachers with various characteristics are reported.

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An editorial statement, which argues in favor of increased accountability for medical teachers, and which briefly summarizes those components of the instructional process around which accountability can begin to be implemented.

Jason, Hilliard. "Is Faculty Development Necessary? In Fact, What Is It?" Journal of Medical Education 53:5, 442.

Jason, Hilliard. "The Health-Care Practitioner as Instructor." From Blakely, R.J., (ed) Fostering the Growing Need to Learn, published by the Regional Medical Program Service, HEW.

This monograph is the most thorough examination known of the rationale for and appropriate approaches to the responsibilities of practitioners serving as teachers of students, patients, and the health professionals. Although a central purpose of this chapter is the improvement of the continued learning of practitioners that can derive from functioning as teachers, there is a substantial and helpful discussion of different techniques of medical instruction, including approaches to its evaluation and improvements. An extensive bibliography is included.

Jason, Hilliard. "The Relevance of Medical Education to Medical Practice," The Journal of the American Medical Association, Vol. 212, (June 22, 1970): 2092-2095.

A significant factor in the quality of an educational experience is its relevance to the careers its students will pursue. This paper is a synopsis of studies and arguments that suggests the need for greater relevance, and some of the ways it might be accomplished.

Miller, George E., M.D., Editor. Teaching and Learning in Medical School, Cambridge, Massachusetts, Harvard University Press, (1962), 296 p.

The book is an outgrowth of a collaboration between medical school faculty and School of Education faculty at the University of Buffalo in the 1950's. For years it has been the only book which was written specifically for medical faculty and, though published in 1962, the ideas expressed remain useful for teachers today. Throughout the book two points of view are stressed: the idea that fruitful learning is that done by the individual learner in order to satisfy his/her needs and goals; and that the purpose of teaching is to make individual learning more efficient and more effective. It is divided into 4 sections, each treating one of the factors which contribute to the climate for learning and its quality: the medical student, the process of learning, the tools of instruction, and the evaluation of learning.

Perlberg, Arye, Ed.D.; Peri, Joseph N., Ed.D.; Weinreb, Max, D.Ds., M.Sci.; Nitzan, Esther, M.A.; and Shimron, Judith. "Microteaching and Videotape Recordings: A New Approach to Improving Teaching." The Journal of Medical Education 47 (1972): 43-50.

Members of the Faculty for Continuing Medical Education of Tel-Aviv University had been participants in a biweekly seminar devoted to theoretical examinations of topics such as curriculum planning, teaching methods, and philosophy of education. They were frustrated by their inability to apply the principles they had learned to their daily problems. Microteaching was employed as a basis for diagnosis and treatment in modifying their teaching behavior. Results indicate that microteaching was not only an effective means of improving their teaching, but helped to change their style from being teacher, lecture, or subject matter centered to one which emphasized "classroom interaction" (use of questioning techniques and seminar discussions).

Rippey, Robert. "Student Evaluations of Professors: Are They of Value?" Journal of Medical Education, Vol. 50, #10, (October 1975): 951-958.

Recent studies of the validity of student ratings of teaching leave much to be desired in the opinion of the author. Adequacy of design, validity, and generalizability are used to evaluate five studies. The articles reviewed include Doyle & Whitely, 1974, Gessner, 1973, Wolken, Naftulin, Donnelley, & Johnson, 1974, Nattulin, Ware & Donnellwy, 1972, and Rodin & Rodin, 1972. The author considers each article critically, evaluates, and discusses reasons for his disapproval for the technical qualities of the article. The study done by Doyle & Whiteley gained Rippey's approval and is used as a model for further inquiry in this area.

Ronus, Stephen N., Banford, Gromash. "The Improvement of Faculty Teaching Through Evaluation: A Preliminary Report," Journal of Surgical Research, 11, (1971): 311-315, and Rous, Stephen N., Banford, Gromash, The Improvement of Faculty Teaching Through Evaluation: A Follow-up Report," Journal of Surgical Research, 13, (1972): 262-266.

Two articles describing a program to improve the quality of faculty teaching through evaluation and then the follow up on this study. Sixteen faculty members on the clinical faculty of a medical school who participated in an evaluation learned the results of that evaluation and then were re-evaluated. Statistically significant improvement was demonstrated in their overall teaching profiles and in four of the five separate teaching categories.

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The author presents a guide for teachers who would like to learn about and possible use small group teaching methods. Topics include a definition of group teaching, a review of group dynamics, specific techniques and strategies for the effective use of this method, reasons for adopting group teaching, advantages and disadvantages, and benefits to the students. A bibliography is included.

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Videotape Packages

Teaching Improvement Project System for Health Care Educators:

"The Demonstration"
"Questioning: The Mechanics and Dynamics"
"Putting it All Together"

TIPS materials include, in addition to the videotapes listed above, guide, workbooks, and manuals on the topics of test writing, performance evaluation, media development, and the use of instructional objectives.

Information is available from:

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Others

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UNIT II: A DIRECTORY OF FACULTY DEVELOPMENT CONSULTANTS

UNIT II: INTRODUCTION

The field of faculty development has grown sufficiently in higher education and medical education to have produced a cadre of experienced professionals. Many of these individuals can offer expert assistance to the colleges of osteopathic medicine in designing, developing, and implementing faculty development programs. This section presents a directory of such experts, who have expressed a willingness to serve in a consulting capacity on faculty development.

The consultants listed in this directory were asked to specify their major areas of expertise and experience; these areas form the major divisions of the directory: CURRICULUM; EVALUATION AND TESTING; FACULTY DEVELOPMENT; INSTRUCTIONAL DESIGN; INSTRUCTIONAL TECHNOLOGY; MEDICAL EDUCATION; ORGANIZATIONAL DEVELOPMENT; SIMULATION; TEACHING METHODS; WORKSHOPS; and OTHER SPECIALTIES. Each consultant is listed in as many areas as he or she specified. In some cases the areas mentioned by a consultant did not fit easily into a major division; in such cases the consultant has been listed in the final section, OTHER SPECIALTIES. Users of this directory are encouraged to review this OTHER SPECIALTIES section for consultants in areas of special interest, such as interpersonal relations or intern/resident training. Within each major division, alphabetical listings are grouped by specialists in (a) higher education and (b) medical education.

This directory is not a comprehensive listing of consultants in faculty development or education, but it does provide a broad sampling of experience and expertise. It is offered with the qualification that the Faculty Assessment Project could not evaluate the ability or background of each consultant.

It is recommended that consultants be selected with the same care used in the selection of a new faculty member. Examine a consultant's experience, and solicit comments from others who have used the consultant. Develop program objectives and allow your consultant to suggest the process he or she is most familiar with in meeting these objectives. The most successful outcomes will emerge from a cooperative approach in which a consultant and a college are comfortable using each other's resources.

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B: Medical Education

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TEACHING METHODS Cont'd.

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Area of Specialty: Grantsmanship; health care delivery

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Area of Specialty: Administrative development; Dean's role in faculty development

Donald P. Hoyt, Ph.D.
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Area of Specialty: Measurement; political dynamics; relating evaluation to development

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Area of Specialty: Creating change; long-range planning, inter-organization collaboration; teambuilding; management development

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Small Colleges Consortium
2000 P Street, NW
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Area of Specialty: Administrative development; personal/professional growth plans

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Area of Specialty: Administrative Management

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Area of Specialty: Educational Psychology applied to health science education

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Area of Specialty: Computer-based education; script writing for medical television

Libby Hruska, Ed.D.
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Area of Specialty: Teaching improvement; workshops on communication, life-planning, stress management, time management, goal-setting

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National Center for Faculty Development
School of Medicine
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Area of Specialty: Humanizing the educational process; facilitating personal and institutional change

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Area of Specialty: Evaluation; instructional planning; faculty development

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Area of Specialty: Interpersonal communciation between faculty and students, and between students and patients; doctor-patient relations; patient education, counseling

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Area of Specialty: Clinical osteopathic medical education; post-doctoral continuing medical education; medical administration

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Director, Program for Educational Development
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CANADA (416) 525-9140 (2113)

Area of Specialty: Clinical problem solving

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Department of Pediatrics
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Area of Specialty: Case presentations; continuing medical education; residency training programs

UNIT III: AN ASSESSMENT OF PRIVATE AND FEDERAL SOURCES OF FUNDS FOR CONDUCTING FACULTY DEVELOPMENT PROGRAMS

UNIT III: INTRODUCTION

UNIT III is divided into two sections: A: PRIVATE FOUNDATIONS, and B: FEDERAL SUPPORT FOR FACULTY DEVELOPMENT IN COLLEGES OF OSTEOPATHIC MEDICINE. SECTION A: PRIVATE FOUNDATIONS includes several subsections. These are:

Part 1. An overview of foundation grants awarded for faculty development and related projects from 1974 to 1977. These are listed alphabetically by the foundation's name. Although this overview cannot be comprehensive, it gives an excellent indication of the size and kinds of awards that have been made.

Part 2. Foundation Profiles: Major Foundations of National Scope. These foundations, organized alphabetically, have made a substantial commitment to faculty development and medical education. They may be considered primary targets for foundation grant proposals.

Part 3. Foundation of Local or Restricted Scope. These foundations have expressed interest in medical research, medical education, and/or hospitals. The majority of these foundations are concerned with "local" giving, though the exact range should be investigated in any specific case. These foundations are listed by state, alphabetically, for those states with colleges participating in this project; each listing includes the foundation address, and telephone number (when available).

Part 4. Foundation Support for Faculty Development in Colleges of Osteopathic Medicine. This is a set of candid observations and suggestions for seeking private foundation funds. Part 4 was prepared by Dr. William Bergquist, faculty development consultant and author of A Handbook for Faculty Development, Volumes I and II.

Part 5. A bibliography on Faculty Development for Colleges of Osteopathic Medicine. This bibliography is a comprehensive survey of the literature on faculty development in general higher education and medical education.

SECTION B: FEDERAL SUPPORT FOR FACULTY DEVELOPMENT IN COLLEGES OF OSTEOPATHIC MEDICINE is an assessment of program funding in the public sector. SECTION B was prepared by Mr. Donald K. Pollock, Sr., a private consultant familiar with the Federal scene for some 20 years. Mr. Pollock has organized his document into the following sub-headings: Introduction; Locating Support; Establishing Contact; Commitment versus Interest; Improving Proposal Preparation; Timing; Dealing with Unsuccessful Proposals; and Section B: Summary.

SECTION A: PRIVATE FOUNDATIONS

SECTION A: INTRODUCTION

This section lists a number of large and small national and local foundations which have supported faculty development projects in the past and may be expected to continue their interest in this area into the future. These lists are regarded as a first step in the process of assessing sources of support in the private sector. Additional procedures for securing foundation funding for faculty development projects are outlined.

Private foundation support for higher education has been extensive, and faculty development activities and research have constituted a sizeable portion of this funding. The range of activities and research included under the phrase "faculty development" is quite broad. It includes such projects as a new faculty lounge, travel expenses for professional association meetings, curriculum development support, and base-line research on faculty educational needs. It must be emphasized that any foundation listed may support only some of these projects. It must also be emphasized that the grant history of any foundation is best considered a guide to the foundation's interests; it is not necessarily a restriction of those interests. Virtually all foundations have outlined broad categories of special concern, and any proposed project may be found supportable, even if the particular foundation has not supported identical projects in the past.

In view of the possibility that any foundation's interests will change, especially as new areas of concern -- such as faculty development -- come into greater national prominence, the present list cannot be complete or comprehensive. Local foundations, for example, may well come to recognize the importance of faculty development in the osteopathic medical schools in their cities or states; if they have not already supported such projects in the past they are not on this list, but their exclusion should not be interpreted to mean that they never will support faculty development projects. Similarly, major national foundations frequently institute special funding programs, and several in the past have selected faculty development for such support. These foundations should be monitored periodically, to keep abreast of special opportunities.

The single most valuable resource available to the college of osteopathic medicine is The Foundation Center (888 Seventh Avenue, New York, NY 10019), which is an independent, non-profit organization designed to gather, analyze, and disseminate information on private foundations. The American Association of Colleges of Osteopathic Medicine currently is an Associate of The Foundation Center, and can supply the colleges with information requested from the Center. Each college is encouraged to become an Associate of the Center, for the most efficient and direct use of its resources.

Several documents have provided the information listed below. These are:

The Foundation Directory, 6th Edition. New York: Columbia University Press, 1977.

The Foundation Center National Data Book. New York: The Foundation Center, 1977.

The Foundation Center Source Book Profiles. New York: The Foundation Center, 1977.

The Foundation Grant Index, 1977. New York: Columbia University Press, 1978.

COMSEARCH Printouts from The Foundation Center on *Medical Education* and *Higher Education*.

Part 1: Foundation Grants Awarded for Faculty Development or Medical Education, 1974-77

Part 1: Foundation Grants Awarded for Faculty Development or Medical Education, 1974-77.

Commonwealth Fund, New York

$500,000 to Downstate Medical Center, College of Medicine, Brooklyn, New York, to support major development in teaching and research and further improvement in education for medicine sequences.

Davis (Arthur Vinning) Foundation, Florida

$ 40,000 to Kalamazoo College, Kalamazoo, Michigan, for faculty development.

Frueauff (Charles A.) Foundation, New York

$ 25,000 to Westminster College, Salt Lake City, Utah, for faculty enrichment.

Johnson (Robert Wood) Foundation, New Jersey

$145,380 to Student Medical Association, Washington, DC, to support national medical preceptorship program.

Kellogg (W. M.) Foundation, Michigan

$184,000 to Olivet College, Olivet, Michigan, for faculty training in competency-based education.

$167,000 Warner Pacific College, Portland, Oregon, for faculty development (3 years).

$156,000 to Nazareth College, Kalamazoo, Michigan, for faculty training in competency-based education (2 ½ years).

$147,640 to Idaho Hospital Research and Education Foundation, Boise, Idaho, to implement a continuing education program for trustees of health care institutions (3 years).

$135,491 to University of the Pacific, Stockton, California, for faculty development (2 ½ years).

$127,700 to Gordon College, Wenham, Massachusetts, to implement a faculty development program (4 years).

$ 98,075 to Northeastern Illinois University, Center for Program Development, Chicago, Illinois, to prepare faculty for nontraditional teaching assignments.

Lilly Endowment, Indiana

The following grants were awarded for faculty development programs:

$145,000 to Knox College, Galesburg, Illinois.
$140,500 to University of Wisconsin, Madison, Wisconsin.
$123,140 to St. Olaf's College, Northfield, Minnesota.
$113,500 to Harvey Medical College, Claremont, California.
$108,500 to Mississippi College, Clinton, Minnesota.
$ 99,300 to Virginia Commonwealth University, Richmond, Virginia, to introduce and develop program for evaluation of faculty.
$ 97,775 to Azusa Pacific College, Azusa, California.
$ 95,150 to University of Rhode Island Instruction Development Program, Kingston, Rhode Island.
$ 94,381 to Regis Education Company, Denver, Colorado.
$ 74,150 to Hope College, Holland, Minnesota.
$ 78,696 to University of Akron, Endowment Fund, Akron, Ohio.
$ 69,799 to Dartmouth College, Hanover, New Jersey.
$ 60,285 to Kenyon College, Gambier, Ohio.
$ 60,000 to Muhlenberg College, Allentown, Pennsylvania.
$ 55,646 to Evergreen State College, Olympia, Washington.
$ 50,000 to Southern Methodist University, Dallas, Texas, for staff and faculty development.

Macy (Josiah), Jr., Foundation, New York

$159,500 to Morehouse College, Atlanta, Georgia, Medical Education Program to support office of medical education.

Mellon (Andrew W.) Foundation, New York

The following grants were awarded for the improvement of medical education:

$450,000 to Columbia University, College of Physicians and Surgeons to provide teaching and research opportunities for outstanding young faculty members in the basic medical sciences, New York, New York.
$450,000 Harvard University, Cambridge, Massachusetts.
$450,000 Johns Hopkins University, Baltimore, Maryland.
$325,000 Duke University, Durham, North Carolina.
$325,000 Stanford University, Stanford, California.
$325,000 University of Chicago, Chicago, Illinois.
$325,000 Yale University, New Haven, Connecticut.

$275,000 Cornelle University, Ithaca, New York.
$275,000 New York University, New York, New York.
$200,000 Case Western Reserve University, Cleveland, Ohio.
$200,000 University of Pennsylvania, Philadelphia, Pennsylvania.
$200,000 University of Rochester, Rochester, New York.
$200,000 Vanderbilt University, Nashville, Tennessee.
$200,000 Washington University, St. Louis, Missouri.
$200,000 Yeshiva University, New York, New York.

The following grants were awarded for faculty development:

$240,000 to Occidential College, Los Angeles, California, to strengthen and expand program for professional development of faculty.
$230,000 to Davidson College, Davidson, North Carolina, for two-part program to provide increased opportunities for professional development.
$225,000 Lehigh University, Bethlehem, Pennsylvania, to support program of faculty development designed to increase faculty flexibility, explore relationships between the minorities and effective teaching.
$185,000 to Earlham College, Richmond, Indiana, to enable college to maintain and strengthen complementary programs of faculty evaluations and improvement and to revitalize curriculum.
$185,000 to Haverford College, Haverford, Pennsylvania, for program of curriculum and faculty development guided by committee on general programs.
$175,000 to Knox College, Galesburg, Illinois, for faculty development program.

Merck Company Foundation - New Jersey

The following grants were awarded for the improvement of the quality of medical education:

$ 20,000 Eastern Virginia Medical School, Norfolk, Virginia.
$ 20,000 Michigan State University, East Lansing, Michigan.
$ 20,000 Ohio State University, Columbus, Ohio.
$ 20,000 State University of New York, Albany, New York.
$ 20,000 Texas Technological University, Lubbock, Texas.
$ 20,000 University of Alabama, Birmingham, Alabama.
$ 20,000 University of Missouri, Columbia, Missouri.
$ 20,000 University of North Dakota, Grand Forks, North Dakota.
$ 20,000 University of South Alabama, Mobile, Alabama.

The following grants were awarded for faculty development programs:

$ 8,000 Medical College of Pennsylvania, Philadelphia, Pennsylvania.
$ 8,000 University of California (Chemistry), Berkeley, California.
$ 8,000 University of California (Pharmacology), Berkeley, California.
$ 8,000 University of Kentucky (Pharmacy), Lexington, Kentucky.
$ 8,000 University of Minnesota (Pharmacology), Minneapolis, Minnesota.
$ 8,000 University of Minnesota (Veterinary), Minneapolis, Minnesota.
$ 8,000 University of Pennsylvania (Medical Center), Philadelphia, Pennsylvania.
$ 8,000 University of South Carolina (Medical College), Columbia, South Carolina.
$ 8,000 University of Virginia (Internal Medicine), Richmond, Virginia.

Northwest Area Foundation, St. Paul, Minnesota

$320,000 to University of Iowa College of Medicine, Iowa City, Iowa, to revise instructional materials and methods, 1974. (Grants historically limited to tax-exempt organization in Northwestern U.S.).

Noyes (Jessie Smith) Foundation, New York

$ 68,000 to Baylor College of Medicine, Center for Allied Health Manpower Development, Houston, Texas, to train experienced allied health professionals or teachers.

$ 50,000 to Dartmouth College, Medical School, Hanover, New Hampshire, for scholarships for selected students interested in providing primary health care to rural areas 4/29/76 (2 years).

Southern Education Foundation, Georgia

$ 20,000 to Atlanta University Center - Office of Intern Development, Atlanta, Georgia, for faculty development and expansion in intern seminars.

Woods Charitable Fund, Illinois

$ 60,000 to Doane College, Crete, Nebraska, for academic upgrading and curriculum development.

Private foundation grants to colleges of osteopathic medicine include:

$10,000 to CCOM, 1976, from the R. McCormick Charitable Trust

$20,000 to WVSOM, 1976, from the Merck Company Foundation

$20,000 to OkCOM/S, 1975, from the Merck Company Foundation

$13,250 to KCOM, 1976, from the Merck Company Foundation

Part 2: Foundation Profiles - Major Foundations of National Scope Funding Faculty Development

Carnegie Corporation of New York

437 Madison Avenue

New York, NY 10022 (212) 371-3200

Types of Support

According to its 1977 Annual Report, the Carnegie Corporation's Charter "provides that all funds are to be used for the advancement and diffusion of knowledge and understanding." Toward this end, the Corporation has made it a policy to select a limited number of special areas in which to concentrate its grants.

Currently, the Corporation's major areas of interest include higher education, particularly support for non-traditional forms of education. It is unlikely that the Corporation will, under its current guidelines, fund projects designed to improve the quality of instruction in the osteopathic medical schools, except in those cases in which an innovative program is proposed, which could have an impact on the schools as a whole, or medical education in general.

Perhaps of most interest and relevance to the D.O. schools is the Corporation's interest in encouraging more effective use of resources, particularly through the establishment of consortia. The Corporation has funded a number of such projects, which have been designed to reduce the cost of education and to improve access to resources among the members of a consortium. This foundation might prove a valuable source of support in any efforts to establish a consortium among the D.O. colleges for the sharing of faculty development knowledge, experience, and expertise.

Restrictions

The Corporation does not operate scholarship, fellowship, or travel grants programs. No grants are made for basic operating expenses or facilities of schools.

Medical Education Support

The Corporation currently does not focus on medical education as a major area of interest. However, medical education clearly falls within its field of interest. It should be noted that the Corporation awarded $5,014 to the National Board of Medical Examiners for the publication of Toward the Measurement of Competence in Medicine by John R. Senior.

Financial Data

For the year ending September 30, 1977, the Corporation awarded $12,787,672 ~~for 92 grants to 25 schools,~~ colleges, and universities, and 67 other organizations. As of Spring, 1978, $8,355,075 additional grant money had been awarded. The investment market value of the Corporation's assets was $272,000,000 as of September 30, 1977.

Application Information

There are no formal procedures for submitting an application or proposal. Submit a statement describing the aims and methods of the project, personnel involved, and financial support requested. Supplementary information and/or a personal meeting may be requested.

The Carnegie Foundation for the Advancement of Teaching
437 Madison Avenue
New York, NY 10022 (212) 371-3200

Types of Support

A large part of this Foundation's support is for retirement allowances and a pension program. In addition, the Foundation is charged "to do all things necessary to encourage, uphold, and dignify the profession of teaching and the cause of higher education in the United States and Canada." The Foundation also initiates special studies on higher education.

Medical Education

The Carnegie Foundation funded the Flexner Report on medical education in 1910, and has continued its interest in medical education. The Carnegie Council on Policy Studies has produced reports on *Higher Education and the Nation's Health* in 1970, and *Progress on Problems in Medical and Dental Education: Federal Support versus Federal Control* in 1976.

Financial Data

The Foundation's assets were $23,745,281 as of June 30, 1977. Approximately $1,000,000 may be expected for programs in 1979.

Application Information

Write to E. Alden Dunham, Secretary, for information on the Foundation's interests, programs and application procedures.

The Commonwealth Fund

Harkness House

1 East 75th Street

New York, NY 10021 (212) 535-0400

Support for Medical Education

The Fund supports medical education research and development in a limited number of medical schools. The Fund recently has supported research on such topics as:

-- Should medical education continue its heavy concentration on basic sciences in the first year? Should every physician "be shaped in the image of the academic medical scientist?"

-- What is the place of the humanities and social sciences in medical education? Should a student pursue an interest in humanities or social sciences in pre-medical years, or as a part of medical school training?

-- The educational impact, and cost effectiveness, of decreasing "territoriality" among departments in medical schools.

-- The use of university educational facilities, staff, departments, etc., by an associated medical school.

-- Relationships between medical school educational objectives and the requirements for pre-medical students.

-- How medical education influences the values and behavior of physicians.

No funds are given for building, basic or clinical research, scholarships or fellowships.

Financial Data

The Fund's assets were $105,637,157 as of June 30, 1977. Grant expenditures were $6,974,621 for 13 grants in education and health affairs.

Application Information

There are no standard application forms. Submit a 2-3 page letter stating the goals of the project, the value of conducting the project at this time, the major participants, institutional and other resources available, stage of the project for which funding is requested, estimated budget, and other sources of support.

A proposal will be invited if the project falls within the Fund's current priorities.

Write to Reginald H. Fitz, M.D., Vice-President.

The Arthur Vining Davis Foundations
255 Alhambra Circle, Suite 520
Coral Gables, FL 33134 (305) 448-7712

Types of Support

The Davis Foundations support a wide variety of projects, according to criteria which are rather ambiguous. The 1977 Annual Report includes the following statement of purposes:

> "We emphasize the insitution's own goals, and its progress implementing them, rather than the merits of a particular proposal which has been submitted. Under this philosophy, funds may as likely be provided for the furnishing of a building or for faculty salary supplements, as for a new consortium program or a dramatic, but untested project."

The 1978 grants program will focus on private education, medicine, religion, and public television.

Financial Data

The Foundations' combined assets were $54,718,789 as of December 31, 1977. Projects in medicine and medical education received $365,000 in 8 grants, and higher education in general received $815,000 in 19 grants.

Application Information

The best first approach is by letter; a simple statement is preferred, describing the institution and something of its philosophy, goals, and needs. A proposal may be requested, along with a site visit.

Write to William R. Wright, Executive Director.

Exxon Education Foundation
111 West 49th Street
New York, NY 10020 (212) 398-2273

Types of Support

The Foundation administers several different programs, each of which supports research and development in aspects of higher education. Of most relevance to the colleges of osteopathic medicine is the Educational Research and Development Program, for projects that promise to lead to wide improvements in instruction, administration, or physical facilities utilization.

Projects which have the potential to benefit or influence a broad segment of higher education are preferred; projects affecting a single institution generally are not considered.

The Foundation does not support operating funds for existing programs, course or curriculum development that is a normal part of a school's activities, or the adoption of already established educational or administrative methods or materials.

Medical Education

During 1977, the Foundation awarded:

-- $12,200 to the Medical University of South Carolina for a self-instruction histology course

-- $97,496 to the University of Miami for a cardiac patient simulator, educational materials, and their evaluation

-- $49,587 to the University of Virginia Medical Center for self-instructional programs in cardiology

--$225,000 to the National Fund for Medical Education, for projects to improve medical education.

Financial Data

The Foundation's assets were $12,828,779 as of December 31, 1977. A total of $6,997,797 was awarded for 3,088 grants.

Application Information

Submit a preliminary outline of the project. The Foundation has a rather fixed requirement for the format of this outline, which should be no more than five typewritten pages, and should include, in the following order:

1) Name of institution; name, title, office address and telephone number of the chief executive officer.

2) Name of the Dean of the unit or head of the department in which the project is to be conducted.

3) Name, title, and office address of the person in charge of the project.

4) A brief descriptive title for the project.

5) A statement of the proposed aims of the project and an explanation of the needs or problems it is intended to address.

6) A description of related work done by others to solve the above problems or to meet the above needs, and an explanation of how the project intends to expand upon or complement those efforts.

7) A full and precise description of the proposed project, covering what is to be done, and how it is to be done.

8) How the effectiveness of the project is to be measured.

9) An explanation of which groups will benefit from the project, and how information from the project will be disseminated.

10) Name, title, and qualifications of each person participating in the project.

11) A detailed budget, with costs, listing separately the amounts to be contributed by the organization, and other funding sources if any.

12) A statement of expected duration, and how the project will continue when the grant expires, if necessary.

13) The name, title, and original signature (on one copy) of an individual authorized to commit the institution to participation in the project.

Additional information is available from the Foundation.

Ford Foundation

320 East 43rd Street

New York, NY 10017 (212) 573-5000

Types of Support

The range of programs supported by the Ford Foundation is immense, and higher education is an important component of the overall funding picture. The Foundation has outlined broad categories of "Reforms in Higher Education," "Educational Management and Policy," and "The Learning Process and Environment." Currently, the Foundation expects to step up support for projects designed to improve communications among teachers, researchers, and public officials.

In view of this wide range of funding, it is recommended that the Foundation be contacted for information on its programs, interests, and policies. The booklet Current Interests of the Ford Foundation is available free from the Foundation, as is Applying for Grants.

Financial Data

The Ford Foundation's budget for 1978 and 1979 will be $221,100,000 of which $25,000,000 will be spent in the area of education and research. The Foundation's total assets for the year ending September 30, 1977, were $2,159,438,000. A total of $92,230,000 was awarded for grants during the fiscal year ending September 30, 1977.

Application Information

Write for the free booklet, Applying for Grants. Preliminary proposals should set forth objectives, and details of the methods to be used for achieving them, the qualifications of persons involved, and an estimated budget. Write to the Secretary.

Robert Wood Johnson Foundation

P. O. Box 2316

Princeton, NJ 08540 (609) 452-8701

Types of Support

The Foundation supports a few broadly defined areas of need in the health field. According to the 1977 Annual Report, these include: the need to improve access to health care; the need to improve the performance of health care services in order to insure quality care; and the need to develop mechanisms for the analysis of public policies in health care. The Foundation's emphasis is on primary care.

Restrictions

The Foundation does not provide funds for endowments, construction, equipment, or general operating expenses. The Foundation also does not support biomedical research, or international programs.

Medical Education

The Foundation has made the following recent grants in the general field of medical education:

-- 12 fellowships for promising family practice physicians to study and conduct research leading to teaching careers. The awards were $781,051 to the University of Iowa College of Medicine; $587,601 to the University of Utah College of Medicine; and $623,832 to the University of Washington School of Medicine.

-- $540,000 to the Association of American Medical Colleges, for a major program to study the management capabilities of academic medical centers.

-- $24,770 to Stephens College, to study teacher training in health education.

-- $2,500,000 to Meharry Medical College for faculty development, in 1972 and 1977.

The Foundation stresses the training of primary care physicians, and training for rural practice. This emphasis in many of the colleges of osteopathic medicine maight prove of interest to the Foundation.

Financial Data

For the year ending December 31, 1977, the Foundation awarded $36,400,000 for 119 grants designed to improve primary health care in the U.S. At the end of the same year, the Foundation's assets were $512,830,556.

Application Information

There are no special application forms. Submit a letter stating briefly the objectives and significance of the project, the problem design, the qualifications of the organization and individuals concerned, the mechanisms for evaluating the results, and a budget. Include a copy of the tax exempt status certification.

Contact: Miss Margaret E. Mahoney, Vice-President.

The Henry J. Kaiser Family Foundation
2 Palo Alto Square
Palo Alto, CA 94304 (415) 493-5900

Types of Support

The major share of the Foundation's funding is for medicine and health programs. A principal objective is the expansion of comprehensive prepaid health care. The Foundation's areas of interest include:

-- Delivery of high quality health care.

-- Planning and coordination of health care systems.

-- Development of national health policies.

-- Medical technology and its evaluation.

-- Education in the health professions and in health care administration.

-- Solutions to problems in medicine which call for the joint efforts of professionals in various disciplines.

Support for construction and for laboratory/clinical research is unlikely.

Medical Education

Medical education is a program interest of the Foundation, though the level of funding in this area has been relatively low. Projects supported in 1977 include:

-- A major study of graduate medical education by the Association of American Medical Colleges, focusing on the quality of graduate medical education, intra-institutional problems which could be improved, and the transition between undergraduate and graduate medical education.

-- $384,600 to the University of Colorado Medical School, to train academic internists.

Financial Data

The Foundation authorized $5,904,870 in grants during the year 1977. As of December 31, 1977, the Foundation's assets were $181,039,981.

Application Information

There are no special application forms, and no deadlines for grant applications. Submit a letter outlining the plan and objectives of the project. Include relevant information on the sponsoring institution and people involved, and an estimated budget. If the program looks promising, a detailed proposal will be requested.

Contact: Mr. Robert G. Lindee, Vice-President.

W. K. Kellogg Foundation
400 North Avenue
Battle Creek, MI 49016 (616) 965-1221

Types of Support

Current areas of funding activity are limited to the fields of education, health, and agriculture. The Foundation does not generally fund research activities, but concentrates on projects that stress the application of existing knowledge.

Within the broad area of education, the Foundation has outlined a number of special interests:

-- Improving teaching and learning in postsecondary education; increasing faculty/staff proficiency; encouraging competency-based education models.

-- Improving governance and management of postsecondary educational institutions and systems; developing administrative and team leadership; furthering inter-institutional cooperation and effectiveness.

-- Coordinating and improving career education; developing new curricula, and improving counseling.

-- Providing continuing professional education; encouraging the development of alternative educational delivery systems.

The Kellogg Foundation also has identified a primary goal of improving access to family health care, through the funding of projects aimed at increasing the distribution and availability of primary care and family practice. The Foundation currently funds 16 model projects, which include expanded educational opportunities for medical personnel, especially family practice residencies.

The Foundation is most interested in those worthy projects which will be able to support themselves after the termination of Kellogg funding.

Medical Education

Recently the Foundation has awarded a large number of grants for nursing training programs, and appears to be moving in the direction of nursing and physician extender education.

Other recent grants in medical education include:

-- $100,000 to the Association of American Medical Colleges, for a national program on the future of graduate medical education.

-- $30,497 to the Michigan State University Foundation for a national conference on Assurance of Quality of Medical Education.

-- $681,034 to the University of New Mexico, for an experimental curriculum for primary care physicians.

-- $250,000 to the American Osteopathic Association to study why physicians chose to become general practitioners rather than specialists, the accreditation and approval process of colleges of osteopathic medicine, osteopathic hospitals, and osteopathic postdoctoral specialty training.

The Foundation has supported the Kansas State University Center for Faculty Evaluation and Development, which serves more than 100 colleges and universities.

Financial Data

As of the year ending August 31, 1977, the Foundation awarded $38,115,356 for programs, with $9,592,469 for education and $18,673,985 for health and medicine. The Foundation's assets at the end of the same period were $926,446,013.

Application Information

Submit a proposal letter or memo, briefly describing the basic problem and the plan for its solution. Include project objectives, operational procedures, time schedules, and personnel and financial resources available and needed. Personal visits are not encouraged at this stage. A conference and a more detailed proposal may be requested.

Contact: The Secretary.

Lilly Endowment, Inc.
2801 North Meridian Street
Indianapolis, IN 46208 (317) 924-5471

Types of Support

The Endowment has outlined several broad program themes: human development, family/personal development; strengthening independent institutions; encouraging responsive government.

Support for faculty development, improvement of instruction, and development of instructional resources has been very large. The Endowment has awarded at least $3,525,699 for such projects in 1977.

The Endowment states in its Annual Report that it does not fund projects in health care fields, but it is possible that it will approve grants in medical education, particularly faculty development. This possibility should be explored directly with the Endowment.

Financial Data

As of December 1977, the Endowment awarded $31,725,935 in grants. Its assets at the same time totaled $117,112,232.

Application Information

Submit a letter summarizing the proposed project. Describe its purpose, and how it will accomplish that purpose. State the expected results, the amount of money requested from the Endowment, and any other sources of financial support. Do not exceed two pages. A full proposal may be requested. See the yearly report for detailed information on full proposal format and contents.

Josiah Macy, Jr. Foundation
One Rockefeller Plaza
New York, NY 10020 (212) 246-8830

Types of Support

According to its Annual Report, "it is the policy of the Macy Foundation to concentrate on a few major areas of interest for a sufficient time to achieve program goals. The Foundation's primary focus is on medical education."

The Foundation's 1977 programs included:

-- Faculty Scholar Program: Sabbatical awards to members of faculties of schools of medicine and public health for a period of concentrated scholarship.

-- Minorities in Medicine: Grants to strengthen preparation for medical education at predominantly black colleges.

-- Pediatrics in developing countries.

-- General Foundation interests.

-- Editorial Assistance Grants: To support committed authors in the completion of manuscripts relating to medicine and health.

The Foundation supports the Thirteen-School Consortium of Medical Schools, which in 1977 undertook a study of comparative methods for evaluating student performance, curricula, and teaching effectiveness.

Financial Data

The Foundation awarded $2,104,536 for 26 grants in the year ending December 31, 1977. For the same period, the Foundation's assets were $40,481,466.

Application Information

Submit proposals to the President of the Foundation. Proposals should include the name of the institution, a description of the project, special qualifications of the person or persons who will carry out the project, a list of sources of funds already available, suggested budget, and a letter of endorsement from the head of the sponsoring institution. The budget should not include indirect expenses.

The Andrew W. Mellon Foundation
140 East 62nd Street
New York, NY 10021 (212) 838-8400

Types of Support

According to its 1977 Report, a "continuing major focus of Foundation commitments was the support of professional education and research and of selected programs at leading universities and colleges." Major program areas supported by the Foundation are: Asian Studies; Research Libraries; Advanced Research and Scholarship; Curricular Development; Humanities, Science and Technology; Independent Liberal Arts Colleges; and Minority Education.

In the area of faculty development, eleven colleges received grants ranging from $175,000 to $250,000. Three universities received grants totalling $1,125,000 for curriculum development.

Support for Medical Education

The Foundation did not award grants in 1977 for support of faculty development in medical education. However, $1,775,000 was awarded for projects which include research and training. Of special interest is a grant of $450,000 to Dartmouth Medical School for the improvement of clinical training in rural care.

Financial Data

The Foundation's assets totalled $776,376,000 as of December 31, 1977. Grant appropriations for the year were $42,343,888.

Application Information

Although the Foundation will accept full proposals without prior contact, it is preferable to make an inital approach by letter. Guidelines on proposal preparation are available from the Foundation.

The Merck Company Foundation

P. O. Box 2000

Rahway, NJ 07065 (201) 574-4375

Support for Medical Education

The 1977 Annual Report states that "enhancement of the quality of medical education has been and continues to be the major purpose of the Foundation, from helping qualified medical students achieve their academic goals to aiding physicians in developing their teaching skills."

Grants awarded for faculty development totalled nearly $200,000 in 1977, in the form of small gifts ($8,000) to twenty-two medical schools and basic science departments.

The Philadelphia College of Osteopathic Medicine has received yearly grants for financial aid for needy medical students from disadvantaged population groups, including $1,500 in 1977.

Michigan State University College of Osteopathic Medicine received $20,000 in 1974 as part of the Foundation's Medical School studies Program.

West Virginia School of Osteopathic Medicine received $20,000 in 1976 as part of the Medical School Studies Program, which has been used to support the college's faculty development program.

Financial Data

The Foundation's assets were $2,279,629 as of December 31, 1977. During 1977, $1,893,281 was awarded for grants and fellowships.

Application Information

Grants generally are made on the initiative of the Foundation.

Part 3: Foundation Profiles - Foundations of Local or Restricted Scope Funding Medical Education by State

Part 3: Foundation Profiles - Foundations of Local or Restricted Scope Funding Medical Education by State

ILLINOIS

Abbott Laboratories Fund
Abbott Park 6A
North Chicago 60064

Berlin (M.H.) Foundation
c/o Miriam W. Burleson
1603 Orrington Avenue
Evanston 60201

Chicago Community Trust, The
208 South LaSalle Street
Chicago 60604

Container Corporation of America Foundation
One First National Plaza
Chicago 60670

D and R Fund
8000 Sears Tower
Chicago 60606

Gould Foundation
8550 West Bryn Mawr Avenue, 10th Floor
Chicago 60631

Joyce Foundation, The
135 Douth LaSalle Street, Room 2319
Chicago 60603

Joyce (The John M. and Mary A.) Foundation
P.O. Box 7
Joliet 60434

Keating Family Foundation, Inc.
640 Winnetka Mews
Winnetka 60093

Keystone Consolidated Industries Charitable Trust
411 Hamilton Boulevard
Peoria 61642

Part 3: Foundation Profiles - continued

LaSalle Steel Foundation
Prudential Plaza, Room 2104
Chicago 60601

Marquette Charitable Organization
2141 South Jefferson Street
Chicago 60616

McCormick (Robert R.) Foundation
435 North Michigan Avenue, Room 1412
Chicago 60611

Northwest Industries Foundation, Inc.
c/o Northwest Industries, Inc.
6300 Sears Tower
Chicago 60606

Pritzker Foundation
Two First National Plaza, 30th Floor
Chicago 60603

Rice Foundation
141 West Jackson Boulevard, Room 363
Chicago 60604

Scholl (The Dr.) Foundation
111 West Washington Street, Suite 2137
Chicago 60602

Teich (Curt) Foundation
P.O. Box 271
Lake Forest 60045

Thoresen Foundation, The
2310 West 58th Street
Chicago 60636

IOWA

Blank (The Myron and Jacqueline) Charity Fund
Empire Building
209 Sixth Avenue
Des Moines 50309

Bohen Foundation, The
1716 Locust Street
Des Moines 50303

Cowles (Gardner and Florence Call) Foundation, Inc.
(formerly Gardner Cowles Foundation)
715 Locust Street
Des Moines 50304

Hall Foundation, Inc., The
1215 Merchants National Bank Building
Cedar Rapids 52401

Hanson Foundation, The
c/o John K. Hanson
P.O. Box 421
Forest City 50436

Lennox Foundation
200 South 12th Avenue
Marshalltown 50158

Maytag (The Fred) Family Foundation
P.O. Box 39
Newton 50208

Pella Rolscreen Foundation
c/o Rolscreen Company
Pella 50219

Ruan (John) Foundation Trust
3200 Ruan Center
Des Moines 50304

Wahlert Foundation
539 Hill Street
P.O. Box 56
Dubuque 52001

Younkers Foundation, Inc.
c/o Younker Brothers
Seventh and Walnut Streets
Des Moines 50309

MISSOURI

Gaylord (Clifford Willard) Foundation
c/o Boatmen's National Bank
P.O. Box 7365, Main Post Office
St. Louis 63166

Goppert Foundation, The
222 West Gregory Boulevard
Kansas City 64114

Green (Allen P. and Josephine B.) Foundation
P.O. Box 523
Mexico 65265

Mallinckrodt (Edward), Jr. Foundation
c/o Chas. C. Allen, Jr.
611 Olive Street
St. Louis 53101

Olin (John M.) Foundation
7701 Forsyth Boulevard
St. Louis 53105

Smith (Ralph L.) Foundation
c/o The First National Bank of Kansas City
14 West Tenth Street
Kansas City 64105

Speas (Victor E.) Foundation
c/o The First National Bank of Kansas City
14 West Tenth Street
Kansas City 54105

Swinney (Edward F.) Fund
406 Board of Trade Building
Tenth and Wyandotte Streets
Kansas City 64105

NEW JERSEY

Bristol-Myers Fund
225 Long Avenue
Hillside 07901

Bunbury Company, Inc., The
450 Springfield Avenue
P.O. Box 777
Summit 07901

Campbell Soup Fund
Campbell Place
Camden 08101

Engelhard (The Charles) Foundation
75 Claremont Road
P.O. Box 761
Bernardsville 07924

Friedland (Samuel) Family Foundation
222 South Marginal Road
Fort Lee 07024

Geist Foundation, The
c/o J. H. Cohn and Company
810 Broad Street
Neward 07102

Hoffman-LaRoche Foundation, The
P.O. Box 278
Nutley 07110

Hoyt Foundation, The
Half Acre Road
Cranbury 08512

Hyde (The Lillia Babbitt) Foundation
507 Westminster Avenue
Elizabeth 07208

International Foundation, The
c/o Vignola and Carrico
1375 Route 23
Butler 07405

Kirby (F. M.) Foundation, Inc.
17 De Hart Street
Morristown 17960

Knistrom (Fanny and Svante) Foundation
30 Lori Road
Moumouth Beach 07750

Lipton (Thomas J.) Foundation, Inc.
800 Sylvan Avenue
Englewood Cliffs 07632

Merck Company Foundation, The
Rahway 07065

Quaker Hill Foundation, The
c/o J. P. Stevens, Jr.
1681 Woodland Avenue
Edison 08817

Schering-Plough Foundation, The
(formerly Schering Foundation, Inc.)
Galloping Hill Road
Kenilworth 07033

Schultz (The William Lightfoot) Foundation
697 Route 46
Clifton 07015

Thomas & Betts Charitable Trust, The
c/o John F. Walsh
36 Butler Street
Elizabeth 07207

Warner-Lambert Charitable Foundation, The
207 Tabor Road
Morris Plain 67950

Watson (The John Jay and Eliza Jane) Foundation
507 Westminster Avenue
Elizabeth 07208

NEW YORK

Abex Foundation, Inc.
530 Fifth Avenue
New York 10036

Abrams (Benjamin and Elizabeth) Foundation, Inc.
465 Park Avenue
New York 10022

Allied Chemical Foundation
1411 Broadway
New York 10018

Allyn Foundation, Inc.
P.O. Box 22
Skaneateles 13152

Banbury Fund, Inc.
100 Wall Street
New York 10005

Bydale Foundation, The
60 East 42nd Street, Room 5010
New York 10017

Cowles Charitable Trust, The
630 Fifth Avenue, Suite 1612
New York 10020

Culpeper (Charles E.) Foundation, Inc.
866 United Nations Plaza, Room 408
New York 10017

Davis (Shelby Cullom) Foundation
70 Pine Street
New York 10005

Deerfield Foundation, Inc., The
767 Fifth Avenue, Suite 2733
New York 10022

Dow Jones Foundation
22 Cortlandt Street
New York 10004

Ferkauf (The Eugene and Estelle) Foundation
c/o Fredric A. Kleinberg
551 Fifth Avenue
New York 10017

Friendship Fund, Inc.
c/o Fiduciary Trust Company of New York
Two World Trad Center
New York 10048

Goodstein (David) Family Foundation, Inc.
Ten West 20th Street
New York 10011

Gordon Fund
c/o William N. Loverd
10 Hanover Square
New York 10005

Grace Foundation Inc.
1114 Avenue of the Americas
New York 10036

Guggenheim (The Daniel and Florence) Foundation
120 Broadway
New York 10005

Guttman (Stella and Charles) Foundation, Inc.
630 Fifth Avenue
New York 10020

Hearst Foundation, Inc., The
888 Seventh Avenue
New York 10019
Mailing address for applications from west of the Mississippi River: c/o
Charles L. Gould, 690 Market Street, Suite 502, San Francisco, CA 94104

Hess Foundation, Inc.
1185 Avenue of the Americas
New York 10036

Huyck (Edmund Niles) Foundation
c/o Manufacturers Hanover Trust Company
600 Fifth Avenue
New York 10020

Johnson (Christian A.) Endeavor Foundation
530 Fifth Avenue
New York 10036

Jones (W. Alton) Foundation, Inc.
70 Pine Street
New York 10005

Kenan (William R.), Jr. Charitable Trust
120 Broadway, Room 3046
New York 10005

Klein (David L.), Jr. Memorial Foundation Inc.
700 Park Avenue
New York 10021

Klingenstein (The Esther A. and Joseph) Fund, Inc.
200 Park Avenue
New York 10017

L and L Foundation
c/o Lawrence E. Brinn
781 Fifth Avenue
New York 10022

LILCO Charitable Trust
250 Old Country Road
Mineola 11501

Lasdon Foundation, Inc.
280 Park Avenue
New York 10017

Lee (James T.) Foundation, Inc.
40 Wall Street, 28th Floor
New York 10005

Lowe (The Joe and Emily) Foundation, Inc.
720 Fifth Avenue
New York 10019

Lubin (Joseph I. and Evelyn J.) Foundation, Inc.
250 Park Avenue
New York 10017

Manning (The James Hilton) and Emma Austin Manning Foundation
100 Wall Street, 19th Floor
New York 10005

Manufacturers Hanover Foundation
c/o Stanley van den Heuvel
350 Park Avenue
New York 10022

Markle (The John and Mary R.) Foundation
50 Rockefeller Plaza, Suite 940
New York 10020

Metzger Price Fund
1501 Broadway
New York 10036

Milbank Memorial Fund
40 Wall Street
New York 10005

Monell (The Ambrose) Foundation
c/o Mrs. A. M. Hulick
30 Rockefeller Plaza
New York 10020

Morgan Guaranty Trust Company of New York Charitable Trust
23 Wall Street
New York 10015

Moses (Henry and Lucy) Fund, Inc.
c/o Moses and Singer
51 West 51st Street
New York 10019

Muehlstein (The Herman) Foundation, Inc.
866 United Nations Plaza
New York 10017

Neuberger (Roy R. and Marie S.) Foundation, Inc.
522 Fifth Avenue
New York 10036

New-Land Foundation, Inc., The
200 Park Avenue
New York 10017

Newman (Jerome A. and Estelle R.) Assistance Fund, Inc.
400 Park Avenue
New York 10022

Nichols Foundation, Inc.
630 Fifth Avenue, Room 1525
New York 10020

Overbrook Foundation, The
730 Fifth Avenue
New York 10019

Perkins (The George W.) Memorial Foundation
660 Madison Avenue
New York 10021

Pfeiffer (Gustavus and Louise) Research Foundation
20 Broad Street
New York 10005

Pforzheimer (The Carl and Lily) Foundation, Inc.
70 Pine Street, Room 3030
New York 10005

Rosenwald (The William) Family Fund, Inc.
122 East 42nd Street, Room 3400
New York 10017

Rubinstein (Helena) Foundation, Inc.
261 Madison Avenue
New York 10016

Schwartz (Arnold) Fund for Education and Health Research
465 Park Avenue
New York 10022

Sprague (The Seth) Educational and Charitable Foundation
c/o United States Trust Company of New York
45 Wall Street
New York 10005

Stark (Virgil and Judith) Foundation, Inc.
936 Fifth Avenue
New York 10021

Surdna Foundation, Inc.
200 Park Avenue, Suite 1619
New York 10017

Tananbaum Family Foundation, Inc., The
(formerly Yonkers Foundation, Inc.)
551 Fifth Avenue
New York 10017

Witco Chemical Corporation Foundation
277 Park Avenue
New York 10017

OhIO

Bolton Foundation
100 Erieview Plaza, 36th Floor
Cleveland 44114

Bremer Foundation, The
708-9 Union National Bank Building
Youngstown 44503

Britton Fund
100 Erieview Plaza, 36th Floor
Cleveland 44114

Cleveland Foundation, The
700 National City Bank Building
Cleveland 44114

Fifth Third Foundation
38 Fountain Square Plaza
Cincinnati 45202

Firestone Trust Fund, The
1200 Firestone Parkway
Akron 44317

Fox (The Harry K. & Emma R.) Charitable Foundation
c/o National City Bank
Cleveland 44101
Mailing address: c/o Harold E. Friedman, 750 Terminal Tower, Cleveland, OH 44113

Frohring (The William O. and Gertrude Lewis) Foundation, Inc.
1956 Union Commerce Building
Cleveland 44115

Higbee McKelvey Charitable Foundation
100 Public Square
Cleveland 44113

Humphrey (George M. and Pamela S.) Fund
100 Erieview Plaza, 36th Floor
Cleveland 44114

Iddings Benevolent Trust
c/o Winters National Bank and Trust Co.
Winters Bank Tower
Dayton 45401

Ingalls (The Louise H. and David S.) Foundation, Inc.
1560 Union Commerce Building
Cleveland 44115

Jochum-Moll Foundation, The
5389 West 130th Street
Cleveland 44111

Kachelmacher Memorial, Inc.
615 Walhonding Avenue
Logan   43138

Kettering Family Foundation, The
2400 Winters Bank Tower
Dayton   45402

Kroger Company Charitable Trust
1014 Vine Street
Cincinnati   45201

Louise Foundation, The
100 Erieview Plaza, 36th Floor
Cleveland   44114

McDonald (Walter A. and George) Foundation
P.O. Box 104, Station O
2761 Erie Avenue
Cincinnati   45208

Miniger (Clement O.) Memorial Foundation
518 Jefferson Avenue, Suite 402
Toledo   43604

Payne Fund, Inc.
810 Hanna Building
Cleveland   44115

Prentiss (The Elisabeth Severance) Foundation
c/o Theodore G. Thoburn
P.O. Box 5756
Cleveland   44101

Wean (The Raymond John) Foundation
P.O. Box 751
347 North Park Avenue
Warren   44481

Wright Foundation
23555 Euclid Avenue
Cleveland   44117

OKLAHOMA

Cities Services Foundation
110 West Seventh Street
Tulsa 74102

Collins (The George and Jennie) Foundation
Collins Building
Sapulpa 74066

Gilcrease (Thomas) Foundation
2591 West Newtion Street
Tulsa 74127

Harmon (Pearl M. and Julia J.) Foundation
135 South Pine Street
Nowata 74048

Kerr-McGee Foundation, Inc.
Kerr-McGee Center
Oklahoma City 73102

Merrick Foundation, The
P.O. Box 998
Ardmore 73401

Oklahoma Gas and Electric Company Foundation, Inc.
P.O. Box 321
Oklahoma City 73101

Phillips Petroleum Foundation, Inc.
1270 Adams Building
Bartlesville 74004

Sarkeys Foundation
1170 First National Center
Oklahoma City 73102

Share (Charles Morton) Trust
c/o Central National Bank
Alva 73717

Titus (C. W.) Foundation
P.O. Box 1596
Tulsa 74101

Tulsa Royalties Company
3229-A South Harvard Avenue
Tulsa 74135

Wagener (The Herman and Mary) Foundation, Inc.
1711 First National Building
Oklahoma City 73102

PENNSYLVANIA

Alcoa Foundation
1501 Alcoa Building
Pittsburgh 15219

Benedum (Claude Worthington) Foundation
223 Fourth Avenue
Pittsburgh 15222

Dravo Corporation & Subsidiaries Charitable Trust
One Oliver Plaza
Pittsburgh 15222

ESB Foundation, The
Five Penn Center Plaza
Philadelphia 19103

Erie Community Foundation, The
P.O. Box 1818
Erie 16507

Fisher Charitable Trust
711 Forbes Avenue
Pittsburgh 15219

Foerdenrer (Percival E. and Ethel Brown) Foundation
2710 Fidelity Bank Building
123 South Broad Street
Philadelphia 19109

Foundation for Cardiovascular Research
c/o Jean R. Bellet
1830 Rittenhouse Square
Philadelphia 19102

Goldman (William) Foundation
1617 J. F. Kennedy Boulevard, Suite 2022
Philadelphia 19103

Hazen (Lita) Charitable Trust
P.O. Box 750
250 King of Prussia Road
Radnor 19088

Kline (Josiah W. and Bessie H.) Foundation, Inc.
42 Kline Village
Harrisburg 17104

Lukens Steel Foundation, The
Coatesville 19320

Murphy (G. C.) Company Foundation
531 Fifth Avenue
McKeesport 15132

Pew (J. N.), Jr. Charitable Trust
c/o The Glenmede Trust Company
1529 Walnut Street
Philadelphia 19102

Philadelphia Foundation, The
1502 Two Girard Place
Philadelphia 19102

Rosenau (Sidney R.) Foundation
c/o Rosenau Brothers, Inc.
640 Allendale Road
King of Prussia 19406

Scaife (Sarah) Foundation, Inc.
(formerly Sarah Mellon Scaife Foundation, Inc.)
1114 Oliver Building
Pittsburgh 15222

Sharonsteel Foundation
P.O. Box 291
Sharon 16146

Steinman (James Hale) Foundation
Eight West King Street
Lancaster 17604

Steinman (John Frederick) Foundation
Eight West King Street
Lancaster 17604

Stott (The Louis L.) Foundation
2107 The Fidelity Building
Philadelphia 19109
Mailing address: Mill Tract Farm, R. D. #2, Douglassville, Pennsylvania 19518

United States Steel Foundation, Inc.
600 Grant Street, Room 5906
Pittsburgh 15230

Wyomissing Foundation, Inc.
P.O. Box 28
Wyomissing 19610

TEXAS

Abercrombie (The J. S.) Foundation
P.O. Box 27339
Houston 77027

Beasley (Theodore and Beulah) Foundation, Inc.
P.O. Box 6210
Dallas 75222

Blaffer (Sarah Campbell) Foundation
521 Capital National Bank Building
Houston 77002

Brackenridge (George W.) Foundation
535 San Antonio Bank and Trust Company
711 Navarro Street
San Antonio 78205

Bridwell (The J. S.) Foundation
P.O. Box 1830
Wichita Falls 76307

Brown (T. J.) and C. A. Lupton Foundation, Inc.
209 West Hattie Street
P.O. Box 1378
Fort Worth 75101

Clayton Fund, The
P.O. Box 2538
Houston 77001

Collins (Carr P.) Foundation, Inc.
P.O. Box 2580
411 North Akard
Dallas 75221

Constantin Foundation, The
2807 Mercantile Bank Building
Dallas 75201

Cooper Industries Foundation
Two Houston Center, Suite 2700
Houston 27002

Cullen Foundation, The
P.O. Box 3331
Houston 77001

Faith Foundation
P.O. Box 7
5650 Kirby Drive
Houston 77001

Fasken Foundation, The
414 West Texas Avenue
Midland 79707

Fikes (Leland) Foundation, Inc.
3200 Republic National Bank Tower
Dallas 75201

Fish (Ray C.) Foundation
2001 Kirby Drive, Suite 310
Houston 77019

Gordon (Meyer and Ida) Foundation
820 Fannin Street
Houston 77002

Haggar Foundation, The
6113 Lemmon Avenue
Dallas 75201

Harrington (The Don and Sybil) Foundation
701 First National Bank Building
Amarillo 79101

Hillcrest Foundation
P.O. Box 6031
Dallas 75283

Hoblitzelle Foundation
5222 Republic Bank Building
Dallas 75201

Kempner (Harris and Eliza) Fund
P.O. Box 119
Galveston 77550

Kleberg (Robert J., Jr.) and Helen C. Kleberg Foundation
King Ranch
P.O. Box 1418
Kingsville 78363
Mailing address: c/o Leroy G. Denman, Jr.
711 Navarro Street, Suite 535
San Antonio, TX 78201

Moody Foundation, The
704 Moody National Bank Building
Galveston 77550

Richardson (Sid W.) Foundation
2103 Fort Worth National Bank Building
Fort Worth 76102

Sumners (Halton W.) Foundation
4500 Republic National Bank Tower
Dallas 75201

West Foundation, The
P.O. Box 491
Houston 77001

West (J. M.) Texas Corporation
P.O. Box 491
Houston 77001

Woolf (The Pauline Sterne) Memorial Foundation
P.O. Box 53568
Houston 77052

WEST VIRGINIA

Kanawha Valley Foundation, The Greater
P.O. Box 3041
Charleston 25331

Part 4: Foundation Support for Faculty Development in Colleges of Osteopathic Medicine

Part 4: Introduction

This section has been prepared to offer the colleges of osteopathic medicine resources that will aid in the procurement of funds for professional development programs. Many of the colleges have not been successful in obtaining external funds for this type of activity, yet hope to increase their level of involvement in this area. This section is intended to not only provide some ideas and guidance for academic administrators and faculty who are seeking funds, but also to encourage effort in this regard.

The essay is not intended for professional fund-raisers, though these people can be very instrumental in assisting academic administrators and faculty to obtain funds. Neither is the paper intended to encompass the rationale or strategies for doing professional development. Fund-raising for a professional development program is only one step in a much more complex planning and implementation process. This section should be used by academic administrators and faculty who are not particularly knowledgeable about grantsmanship. It has been suggested that this essay might even be used in an in-service grantsmanship training program.

Several steps were taken in preparing this essay. William Bergquist first met with members of the AACOM staff and representatives from the AACOM colleges to discuss the purposes and scope of the essay, and to plan for its production. A draft of the essay was first prepared by Dr. Bergquist. He then met for one day with a group of academic administrators, development officers and faculty from the AACOM colleges and Dr. Daniel Pilon, a consultant on institutional grantsmanship. These participants read the draft and provided criticisms, additions, deletions, clarifications and examples. Comments were audio-taped and incorporated in a revised draft of the essay. This draft, prepared by Dr. Bergquist, was sent to the AACOM staff for final revision, editing and typing.

In preparing the essay, the authors felt it important to distinguish between several different kinds of foundations. First, one should recognize the differences between governmental and private foundations. Because governmental funding organizations give away money that "belongs" to the tax payer, there is a great deal of accountability and strict bureaucratic control associated with the review of funding applications. Conversely, the executives of private foundations usually are representing the concerns and best interests of a smaller number of people (individuals or stock holders). They therefore usually have much greater flexibility and autonomy in considering proposals. A private foundation executive can be much more easily courted than an executive from a government foundation.

Second, it is necessary to distinguish between several different kinds of private foundations, and recognize the diverse nature of governmental foundations, particularly with reference to the degree of the governmental agency's involvement in the planning and execution of a project. Private foundations have been categorized by the Council of Foundations according to the source of funds:

> Independent foundations receive their funds from a single person or a few individuals or family. Many of these, especially those that are small, function under the voluntary direction of family members, and such foundations are commonly known as "family foundations." However, others which may bear a family name--e.g. The Rockefeller Foundation--have independent boards of trustees and are managed by a professional staff.

Corporate foundations have been created by profit-making businesses to set more money aside in good years to continue to support charities in lean years.

Community foundations build their endowments from bequests and gifts from numbers of donors, who primarily want their gifts to serve the charities of a city or region, and generally their boards are representative of varied interests in that city or region. For these reason, community foundations were exempted from some of the more stringent provisions of the 1969 Tax Reform Act that apply to private (i.e., independent and corporate) foundations.

The ways in which each of these three types of private foundations are approached will vary greatly. When considering the solicitation of funds for professional development activities, one usually looks to corporate foundations (e.g. the Lilly Endowment, W.K. Kellogg Foundation, Exxon Foundation). Unless otherwise noted, corporate foundations will be referred to when speaking of private foundations.

Governmental foundations can be as easily categorized, though they differ as widely. Some governmental agencies (such as the Title III Developing Institutions office) set up rather strict guidelines concerning the ways in which professional development funds can be requested and spent. These agencies also tend to extensively monitor the projects they fund, hence the project staff's relationship with the foundation does not end when funding is received. In general, these more "interventionistic" foundations provide rather large grants ($100,000 - $1,000,000). Other governmental agencies, which usually offer smaller grants ($1,000 - $200,000), are much more flexible about proposals, and will rarely be involved with a college or project staff after the grant is awarded.

Usually a yearly progress report and end-of-project evaluation report will suffice for communication with the staff of this latter type of governmental foundation.

One also can distinguish between grants and contracts in the solicitation of governmental (primarily federal) funds. A grant is usually considered a gift that is being awarded for past performance or the excellence of an idea. The recipient of a grant has relatively little responsibility to the awarding foundation. A contract, on the other hand, is awarded for the provision of specific services, hence the foundation is much more of a partner in the enterprise and expects frequent communication and cooperative planning with the contract recipient. Most on-campus professional development projects are supported by governmental agencies through grants rather than contracts.

Unless otherwise noted, we will focus on the solicitation of funds from governmental agencies that do not provide strict guidelines and on grants rather than contracts. Governmental agencies that provide strict guidelines usually offer extensive guidance to the potential grantsman about how to prepare proposals and strictly control the nature of any "courtship" of the foundation staff. Furthermore, these interventionistic agencies tend to be unique. A novice grantsman who is approaching one of these governmental agencies should consult with others who have already had extensive experience with the agency, as well as carefully read the guidelines that are published by the agency. It is recommended that the governmental agency be visited as soon as possible during the proposal preparation phase.

It is important to distinguish between regional and national foundations. Many of the private foundations, and some governmental agencies (e.g. at a state or municipal level) limit the range of their benefaction to a specific geographic area. They give money to institutions in a specific state or in the region being served by their parent organization (e.g. a railroad). Most of the private, regional foundations belong in either the independent (family) or community foundation categories that were described above. The regional foundations generally are slower to pick up on general trends in American postsecondary education than are the more visible and cosmopolitan national foundations. Thus, in the case of professional development, many of the regional foundations (e.g. the Northwest Area Foundation) are only now beginning to get into the field.

Frequently, the regional foundations are ignored in favor of the better-known nationals. Admittedly, in many cases, the regional agencies must be educated about current trends in postsecondary education and must be convinced that professional development is a viable, established procedure for institutional advancement. The odds of getting support from these regional foundations, however, may be greater than is the case with the nationals, especially if the project being proposed is not particularly distinctive, but instead is based on practices and concepts that are already accepted and found to be effective.

Readers of this essay are encouraged to keep these various distinctions in mind when preparing a proposal and courting a foundation. Also, a wide range of foundations should be considered. The following section of this essay describesthe current status of foundations in the funding of professional development proposals, and setsthe stage for the final two sections which consider ways in which proposals can be prepared and foundations courted.

Prospects for Funding

The professional development of faculty and administrators in the American postsecondary education community has been generously supported by both private and governmental foundations during the past decade. Depending on how broadly one defines professional development the total amount of money granted for professional development activities during the past ten years amounts to well over a half billion dollars. Much of this money has gone to undergraduate colleges and universities, and major research universities, with a proportionately small amount of money going to professional schools. Only in the case of allopathic medical schools has there been substantial funding for professional development from external sources.

Within the past two years, governmental and private foundation support for this area has significantly declined. Such major foundations as the Eli Lilly Endowment and the W.K. Kellog Foundation have announced that they no longer are going to be deeply involved in the funding of professional (or at least faculty) development programs in the near future. This decline in funding for professional development comes precisely at a point when there are a large number of programs in this area being established and seeking funds.

The competition for dollars therefore is intense and most grant-seekers can expect to be turned down in the area of professional development.

This pessimistic picture can be tempered by two observations. First, because there have been relatively few grants given for professional development in professional schools, private and governmental foundations may still be intrigued by the novelty of a professional development proposal from this sector of the postsecondary education community and may feel some obligation to give support to programs in this "virgin territory".

Second, foundations are still interested in specific aspects of professional development, and are providing substantial grants in several related areas. Many foundations, for instance, recently have expressed interest in professional development programs for college administrators and trustees, and in such areas as curriculum development and institutional planning there are significant funds available. Thus, even though a professional development program that specifically aims at faculty will probably receive limited attention, one that involves college presidents, deans, business managers or registrars, or that makes use of faculty development as a means to some other end (e.g. the development of a new interdisciplinary program or a program for a specific disadvantaged population) will be given careful consideration by many foundations.

To obtain funds for a professional development program one must be able not only to write a compelling proposal, but also plan and implement an effective "courtship" of the foundation(s) from which funds are being sought. In the next two sections of this essay, consideration will be given both to the preparation of a proposal and to personal contact with foundation executives. The observations and suggestions that are being offered certainly are not definitive and several may soon be dated, as foundations change their interests, stylistic preferences and procedures. On the other hand, these observations and suggestions hopefully are provocative and refreshing. Trite and well-worn pieces of advice have generally been avoided.

Preparing a Proposal

Ten principles seem to repeatedly account for the success of proposals that have been written in the field of professional development. These ten principles can be summarized as follows:

1. the proposal is written to promote a good idea rather than demonstrate the scholarly competence of the writer;
2. the proposal is based on and reflects significant past accomplishments in related areas by the institution that is seeking funds;
3. the proposal demonstrates significant institutional commitment to the project in terms of both resources (dollars, release time, facilities) and knowledgeable support from key institutional leaders;
4. the proposal conveys a clear sense of the direct involvement in the preparation of the proposal of those people in the institution (faculty, administrators, staff, trustees) who will benefit from this project;
5. the proposed project incorporates thoughtful and creatively conceived mechanisms for the identification and use of existing campus resources, the delivery of services to all potential consumers, and the continuation of services after external funding is removed;
6. the proposed project makes efficient and effective use of external resources and demonstrates the need for such resources, or relies exclusively on internal resources;

7. the proposal includes a thoughtfully and creatively conceived plan for project evaluation, that is both quantitative and qualitative in nature, that provides a definitive answer to the questions, "how do you know if you have been successful?", and that incorporates plans for the dissemination of learnings from the project to other on-campus and off-campus personnel;

8. the proposal presents a clear and graphic description of resource utilization and scheduling of events, and an appropriate and clearly-presented budget;

9. the proposal contains a plan for professional development that is unique, responsive to the specific needs of the campus, coordinated with other on-going campus activities, and either comprehensive in nature or sensitive to spin-off effects if successful; and

10. the proposal is written with a specific foundation in mind being responsive to the specific concerns and stylistic preferences of this funding organization.

Following is a more detailed consideration of each principle, though the discussion will remain brief and can not possibly incorporate all of the subtle variations and exceptions that are applicable to the preparation of any one specific proposal.

The first principle is given primacy because it is perhaps the most frequent source of difficulty for the novice grantsman. In developing their first programmatic proposal, many faculty and administrators have in mind the traditional proposal for funding of a research project. The latter type of proposal must demonstrate the scholarly competence of the proposal writer. He/she must show mastery of the subject area through extensive review of the literature and careful documentation and footnoting. He/she also must demonstrate a command of the disciplinary language (jargon) in the field.

By contrast, a proposal that is being written to fund a new project (and in particular a new professional development program) should be free of itself isn't already in operation, related projects should be described and linked to the proposed one.

More generally, the proposal should demonstrate -- if possible -- an impressive track record of the college in the wise and prudent use of past funds that have been granted to the college by foundations. If a grantsman can show that his/her college has been able to get a great deal of mileage off a foundation dollar, then other foundations are likely to look favorably upon a proposal.

The third principle concerns another aspect of the Catch-22 dilemma. The college must be able to offer a firm commitment to the project in terms of such tangible resource as dollars, release time, equipment, space and supportive services. If possible, a college ought to put up as much financial support (direct and indirect) as is being requested from the foundation. This financial support might be comprised in part of equivalent dollars for release time, or equivalent dollars for the purchase of new equipment (that is being donated by the college for use in the project). The grantsman, however, should not be too loose or imaginative in deriving his/her figures regarding financial support. Foundation executives are very skillful in seeing through a financial smokescreen. There must be substantial, clearcut financial support for the project from internal, hard money sources. Furthermore, this support can not be offered for just one year, or on a declining basis. Rather, it must be offered throughout the funding period and even after external funding is withdrawn. In most cases, no steps should be taken in drafting a proposal until this commitment is ensured. The time-consuming process of proposal preparation becomes a time-wasting enterprise if this commitment is not forthcoming.

There are several funding strategies that can be used to reduce the adverse impact of this financial support requirement. First, in many instances, foundations will look favorably upon a funding pattern which enables the college to absorb an increasingly large proportion of the total budget from year to year during the funding period. The foundation's support thus will decline over several years, resulting eventually in the elimination of all financial support from an external source.

Second, some of the "hard money" support can come from revenue that is generated by the project: for example, conference registration fees (from off-campus participants), book sales or off-campus consulting fees. Third, a college with an excellent record in receiving and making effective use of grants can sometimes convince a foundation that support from another foundation will be obtained and used to support not only the current project, but also future extensions of the project. Thus, in this instance, a grantsman is demonstrating not so much the commitment of the institution to the project, as the competence of the staff at the institution in obtaining other outside grants which would ensure continuation of the project.

Ultimately, the best strategy in obtaining hard money support for a project is to link the project with the mission and goals of the college. Not only is more hard money likely to be available, the chances of obtaining foundation support also are increased, for the executives of these agencies increasingly are impressed by the project that has been designed not in a vacuum, but rather in the context of institutional decision-making processes. Institutional commitment is expressed, in other words, not just through the commitment of dollars and time, but also through a carefully-conceived correlation between the goals and strategies of a single project and the long-term goals and plans of the college. If a foundation executive believes that a project is being proposed only to generate income for the college and not to advance the institution toward a consensually-based mission or set of institutional goals, then the chances of obtaining a grant are remote. The initial statement in a proposal about the unique contributions to be made by a college, and about the relationship between these contributions and the professional development needs of the college, often is critical to this strategy.

Institutional commitment also should be reflected in the knowledgeable support of key campus leaders for the project. Letters of support from the president, dean or chairperson of a major campus committee should contain enough detail to indicate that the letter writer knows what commitment is being made, why it is being made, and how he/she will be actively involved in the project. If possible, the letter should indicate why the campus leader is personally interested in the project -- why he/she is willing to take time out of a very busy schedule to give this project significant attention during the next few years. This commitment is particularly important if a portion of the leader's time is being released for the project.

The fourth principle also builds on the past history of the college and reflects a level of commitment to and ownership for the project. The proposal should look like it is the product of considerable on-campus input from those people who will be its beneficiaries. If a project is focused on faculty development, then it is essential that the proposal look faculty-produced. The proposal might even be a bit rough, and editorially and stylistically uneven, reflecting the involvement of many people at various stages in its development. An appendix might contain a brief history of proposal preparation, indicating what type and number of people were involved in the preparation of the proposal at each stage.

The proposal should demonstrate ownership by the potential beneficiaries through letters of endorsement from representatives of this population. Governance mechanisms should be build into the project to ensure continued ownership. A faculty development proposal, for instance, might contain a letter from the head of a major faculty personnel committee, and a description of the ways in which members of this committee will oversee, be advisory to, or even manage the proposed project. In the area of professional development, foundation executives are becoming increasingly convinced that those being served must have significant control over a program.

A grantsman who wishes to work alone in the development of a proposal, or who feels most comfortable in exclusively assigning the drafting of proposals to a development officer or institutional grantsman, is best advised not to waste his/her time or the time of his/her staff in preparing a professional development proposal. Unless a proposal is tossed around a bit, it usually will lack conviction. Furthermore, if funded, it is less likely to be successful than is a proposal that has been developed at least in part by those people who will be intimately involved in its daily operation.

The fifth principle leads us directly into the heart of the proposal. The document should demonstrate that effective and efficient use will be made of current resources on campus. Within the past few years, some foundations have become increasingly interested in providing financial support for "natural helping networks". Rather than funding new people and projects that must gain credibility, the foundation executive looks for people and projects that already are serving the campus community. A grantsman might survey existing campus resources in relevant areas, then establish an information and referral clearinghouse, through which those on campus that need specific types of expertise or resources can be linked with those who can be most helpful. A proposal is submitted after this clearinghouse is established. Funds are requested to provide more training, release time or visibility for the "natural helpers". This programmatic model has been very effectively employed in the field of community development, and seems to be equally as applicable in postsecondary educational institutions.

Innovative mechanisms for the delivery of project services also should be identified. Many successful proposals contain some mechanism for the "training of trainers", whereby key staff are primarily involved not in the direct delivery of services, but rather in preparing other members of the college community to provide these services. In this way, there will be a greater spread of impact and greater chance for low cost continuation of these services after the external funds are used up.

Continuation of services also can be ensured through the use of such mechanism as piggy-backing and resource exchange. Piggy-backing involves joint planning of project activities with people and/or organizations elsewhere in the college or off-campus, so that costs can be shared or income derived. A conference, for instance, might be planned in conjunction with another college, or might be opened to people in the region who are not at the college. A small registration fee can be collected which is used to defray expenses for the conference.

A resource exchange mechanism is similar to piggybacking in that it involves cooperation. Staff from a proposed project agree to provide services (secretarial, promotional, consultative) in support of another project that has not yet received external funding. A brochure that publicizes activities for both projects, for instance, might be produced and distributed through funds from the first project. The second project is funded at a point when the first project loses its external support. The staff of the second project reciprocate by providing services, at no cost, to support continuation of the first project.

Many other mechanisms for making use of existing resources, providing efficient services and ensuring project continuation can be identified. The mechanisms that have been briefly described illustrate the range of mechanisms that are possible, and hopefully encourage the grantsman to employ a bit of imagination in conceiving of not only the type of services that will provided, but also the means that will be employed.

The sixth principle concerns the effective and efficient use of external resources. Too frequently, a proposal writer will incorporate rather extensive use of external consultants in the project. While a consultant can add credibility, as well as expertise, and in this way increase chances of funding, it also is often the case that consulting fees (and associated travel, room and board expenses) rapidly consume large sums of money in a project budget.

There are several ways in which consultants can be used efficiently. First, as in the case of piggy-backing, cooperative arrangments can be made to share the costs of consultation. Several colleges might join together to host a consultant, or two departments within a single college might combine financial resources. An even more efficient use of consultants can result from definition of a consultant's role primarily as designer rather than implementer. For instance, instead of asking a consultant to conduct a workshop, one can ask him/her to come in for a shorter period of time (or even consult by mail or phone) to design a workshop which, in turn, will be run by someone at the college. Or, if the consultation involves on-campus data collection, then the consultant need not do all of the time-consuming interviewing or questionnaire analysis. The consultant can assist in the design of the interview schedule or questionnaire. The interviews are then conducted or questionnaires distributed and analyzed by on-campus personnel.

Finally, the consultant can be most effectively and efficiently used if his/her role is clearly related to the job that must be done. An expensive, nationally known consultant might be brought in briefly for his/her expertise or to lend credibility and visibility to a project. Longer term consultation (training, data-collection, mediation) can often be done by lower-priced, less well-known consultants.

Perhaps most importantly, in planning for a project and writing a proposal, one should seriously question whether external resource people really are needed at all. The prospect of receiving a grant should not dissuade one from being frugal. Furthermore, one of the negative impacts of many funded projects is the neglect of local resources, in favor of the outsider. The problem of a prophet being without honor in his/her own land is compounded when money is available to bring in a prophet from another land. As mentioned above, a natural helping network can be identified and used in lieu of an external consultant. Alternatively, an external consultant can be brought in briefly at an appropriate time during the project to bring visibility and legitimacy to the internal resource persons. If extensive use is made of external consultants in a proposed project, thoughtful justification must be given. If internal resources have been systematically surveyed (via a natural helping network analysis) and found to be wanting, then the use of external resources can readily be justified.

The problem of project evaluation has been identified in the seventh principle. This problem deserves a great deal of attention, yet, since so much has already been written in this area a brief overview will suffice here.

Most foundations are becoming increasingly interested in program evaluation, and will accept and even encourage the allocation of at least ten percent of the total budget to this area. The increased interest of foundations in program evaluation seems to be related to an increasing concern with both accountability and dissemination. Thus, the plan for evaluation should not only enable a project director to improve the project while it is in operation (formative evaluation) and to determine the extent to which it has been successful (summative evaluation), but also to effectively convey learnings from the project to other populations both within and outside the college.

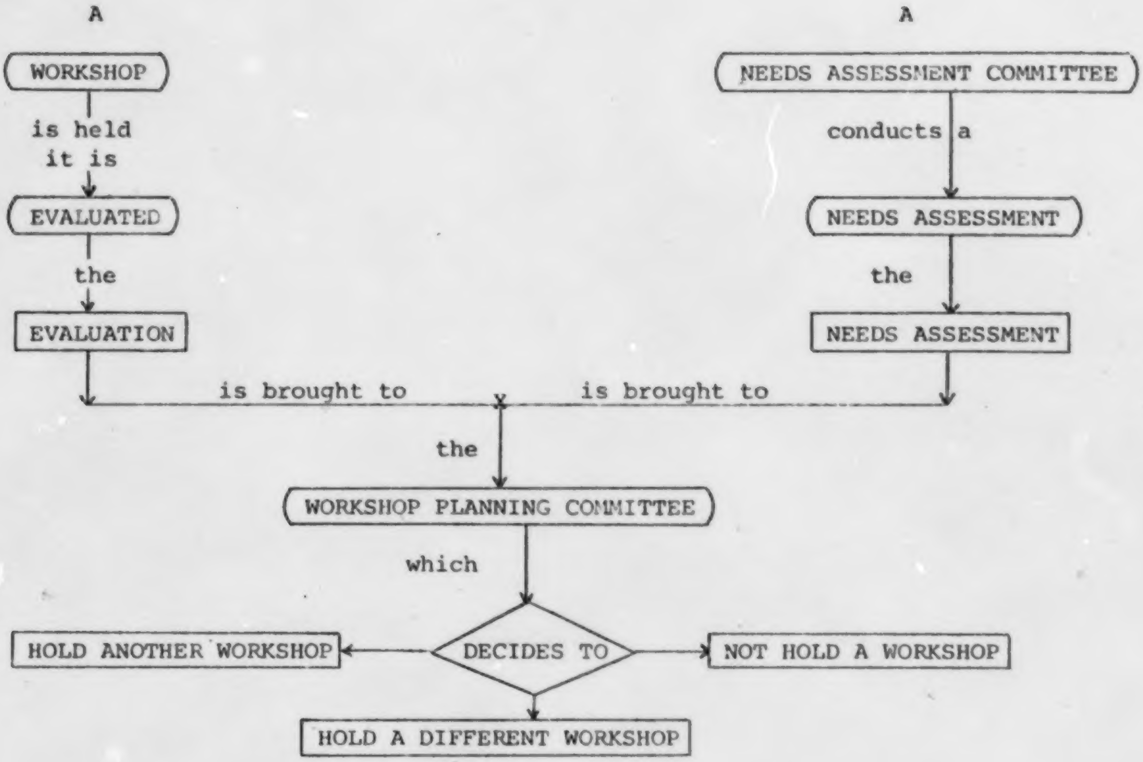
Foundation executives also are becoming increasingly sophisticated about evaluative procedures. They recognize that quantitative data when used exclusively often hides the real effects of a project, restricts the range of an evaluative investigation, and can readily be manipulated. The program evaluation component in a proposal should include both quantitative and qualitative aspects. An effective and low cost evaluation might incorporate a psychometric instrument (questionnaire, rating scale, etc.), a set of interviews and/or observations, and a systematic procedure for documenting and describing the history and accomplishments of the project. Journals, photographs and videotapes often add a touch of reality and innovation to an otherwise mundane evaluation, help to increase the prospects for dissemination of learnings from the project, and increase chances for funding. At a somewhat more advanced level, one might wish to consider the use of the multi-attribute utility analyses that have been developed by the late Marcia Guttentag and Edward Snapper, which are rapidly becoming highly visible and credible, especially at the federal level.

As an eighth principle, we have identified the effective communication of plans for project implementation. This aspect of a proposal is often ignored in the rush to convey the excitement of an idea. Some of the most successful grantsmen have developed strategies for conveying to the reviewer that this project can, in fact, readily be implemented. Often these grantsmen make use of a network, such as a flow chart or critical path method (CPM) analysis to convey a convincing, pragmatic impression. The proposal writer should, at the very least, provide a time schedule, indicating when certain critical events will take place and when major assignments will be completed. Preferably, graphs will be prepared (with the assistance of a graphics artist) that describe the operation of the project in efficient and dramatic fashion.

A flow chart or CPM analysis allows for contingency planning. A grantsman can graphically portray several key choice points where the project might go in one of several directions depending on the outcome of another part of the project. For example, a flow chart might be constructed, as in Figure one, which illustrates how the outcome at one decison point (selection of workshop topic) is contingent on information from two other project activities -- needs assessment and the evaluation of a previous workshop -- and the deliberations of a workshop planning committee. Through the use of graphically-portrayed contingency planning, a grantsman can retain project flexibility, while indicating to the reviewer that he/she has thought through the steps to be taken

FIGURE 1:

ILLUSTRATIVE FLOW CHART


A
WORKSHOP
is held
it is
EVALUATED
the
EVALUATION
A
NEEDS ASSESSMENT COMMITTEE
conducts a
NEEDS ASSESSMENT
the
NEEDS ASSESSMENT
is brought to
is brought to
the
WORKSHOP PLANNING COMMITTEE
which
DECIDES TO
HOLD ANOTHER WORKSHOP
NOT HOLD A WORKSHOP
HOLD A DIFFERENT WORKSHOP

Key: ▢ A complex operation/meeting

□ An outcome/product

◇ A decision

in implementing the project.

Through the use of scheduling and planning procedures, a grantsman is able to demonstrate feasibility -- the most important criterion for many skeptical foundation executives and proposal readers. Feasibility is usually even more directly displayed in the budget that is submitted along with the proposal. This budget must, first of all, be appropriate to the size of the project. If too little money is requested, then the reader is inclined to assume that the proposal writer is naive and that the project, as a result, is likely to be unsuccessful. If an appropriate budget seems high and therefore noncompetitive, the scope of the project should be reduced rather than just the size of the budget.

If a budget is too large, a foundation executive may not necessarily assume that it can be negotiated downwards. Rather, he/she might assume that the grantsman is unrealistic or simply trying to squeeze out some extra dollars, and hence will reject the proposal outright. Consequently, while an initial budget might be a bit "fat", it should always be appropriate, and each expense item should be justifiable. Large budgets are to be avoided not only because the project might not be funded, but also because excess money often creates many problems. With large budgets come unrealistic expections, rivalry, envy and burdensome budgetary control. In addition, the problem of follow-up must be considered. A college which has received a large grant will often be hardpressed to continue this project once the external funds are used up. If the project is reduced to a more realistic level, many people will perceive this reduction as a withdrawal of institutional support. Thus, continued support might require the retention of staff who are not absolutely needed and/or the provision of unwanted services.

A grantsman also must be sure to actively involve the budget officer at his/her college in the preparation of the project budget. This ensures a smooth transition if the project is funded, and eliminates serious problems concerning such issues as indirect cost, release time, space utilization, and staff salaries and benefits. If the academic administrator or faculty member who is given primary responsibility for drafting a proposal works closely with the development officer at his/her college many other logistical problems and sensitive administrative linkages can also be readily eliminated or negotiated.

The ninth principle relates specifically to the formulation of proposals for the funding of professional development projects. As implied in the second section of this essay, foundation executives are somewhat jaded at this point about professional development programs in the postsecondary education community. They tend to be particularly suspicious of professional development projects for faculty that make extensive use of sabbaticals, leaves or other release time mechanisms -- particularly if the events that are to take place during this "free time" are not carefully planned ahead of time and do not link directly with institutional priorities. Foundation executives also tend to be suspicious of professional development projects that lead only to "consciousness raising" about teaching and learning issues, without providing the faculty member with resources (consultation, training) to act on this heightened interest.

Third, foundation executives would like professional development projects to be directly related to institution-wide concerns. A faculty development project, for instance, might be linked to curriculum development, to the recruitment of a new clientele, to problems of attrition, or to attemps at increasing productivity. For the sake of both funding and project effectiveness, the proposal should reflect an understanding of the need for comprehensive services. If one attempts to impact on the role of a faculty member as a teacher, then he/she also must be prepared to deal with both the personal and organizational spinoffs of this role change. The literature in Unit I provides extensive discussions of the components that comprise a comprehensive professional development program (at least for faculty). Foundation executives have generally been quite positively disposed toward this type of conceptual model, though they usually prefer that the instructional development dimension of a project be given central attention.

The final principle to be considered leads us directly into the final section of this essay. The proposal should be tailor-made for the foundation to which it is being submitted. While it is appropriate that a grantsman submit a proposal to more than one foundation, it also is worth his/her time to rework the proposal so that it is particularly responsive to each foundation.

Under the new freedom of information acts, Federal foundations must make copies of all funded proposals available to the general public (unfunded proposals need not be made public and usually are not). Most Federal foundations are unwilling to send/out copies of successful proposals; therefore, a grantsman usually must travel to the foundation to read these proposals. Having taken the time to travel to Washington, D.C. (or elsewhere), one should spend a fair about of time reading proposals. Look for general themes, rather than focusing on an exceptional proposal. If possible, read the comments of proposal reviewers as well as the proposals themselves. Brief, non-interfering conversations with foundation staff of a preliminary, exploratory nature also do not hurt. When feasible, one also should interview successful grantsmen about not only their proposal but also the procedures they followed in contacting the foundation.

These latter points lead us into the next section of the essay on direct contact with foundation executives. Suffice it to say, in closing this section, that an elaborate and elegant courtship is rarely successful if there is no substance to the proposal. The proposal writing phase is important, and should not be short-circuited by the often less arduous and more glamorous task of contacting and relating to foundation executives. The ten principles discussed above should prove useful to the reader in preparing a persuasive proposal.

Contacting the Foundation

Each grantsman will contact and work with a foundation in his/her own distinctive way. The means by which successful grantsmen have established close working relationships with foundation executives are varied and often difficult to describe. In some instances, there is favoritism being shown on the part of the foundation executive. He/she knows the person submitting the proposal from a previous setting in which they both worked or is a close friend of the president of the college. At other times, a foundation will tend to fund a proposal primarily because it has been submitted by a prestigious person or institution. To be able to fund a "Harvard" program supposedly, in some way, makes a foundation more prestigious. There is not much one can do to prepare for or counteract this type of preferential treatment. The "old boy" network thrives in the foundation and grantsmanship world.

Nevertheless, there are several important principles that can help one increase the probability of gaining support for a project from one or more foundations. First, it is imperative that one carefully select the foundation that is to be courted. Information about the foundation should be thoroughly reviewed, and in particular the rhetoric of the bulletin or brochure that describes the grants program to which one will apply should be carefully noted. A great deal of effort is often expended by the foundation staff in preparing these documents. Hence, if there is some indication in the proposal that the documents have been read, the proposals will be more positively received, at least by the staff.

In selecting a foundation it also is highly advisable to look at the track record of the foundation, just as the foundation will look at the track record of the applicant college and staff. One must not only look at the areas in which funds have been given out in the past (information that can be obtained from the Chronicle of Higher Education and various foundation directories), but also the trends of this funding. As a rule, the information about foundations that can be obtained from public documents is already out-of-date--especially with reference to private foundations. One only knows which type of projects were funded during a previous round of proposal reviews. A foundation may radically change its funding patterns in a short period of time. One's best bet is to directly contact foundation executives about current funding priorities. This is not always possible or politic, however, so one must do the second best thing, which is to look at trends.

In what direction does this foundation seem to be moving? If you were to look ahead several years, in what areas do you think this foundation will be funding? For example, several years ago it was quite easy to predict that several of the key national foundations would move from an interest in faculty development to an interest in other types of professional development--particularly, administrative and trusteė development. Having predicted the direction of a foundation during the next year to two, one is in a good position to prepare and submit a proposal. Since one's information is already somewhat dated, and a proposal takes a while to prepare, the proposal should be ready to submit just in time for the emergence of this new funding priority at the foundation. At times this prediction might prove to be false, but when it is true, the payoff can be great. There is nothing more impressive or exciting to a foundation executive than receiving a thoughtfully prepared proposal at the very moment when the foundation has made a commitment to move into this new area.

Finally, in the selection of a foundation, it is often appropriate to consider a plan for joint funding by several foundations. One can design a project such that one component can be financed by one foundation and a second component by another funding agency. Alternatively, one can prepare a basic project format, then develop proposals for certain foundations that join a special theme with this format. In the area of professional development, for instance, one might set up a basic clearinghouse for information about instructional innovations on campus. One proposal might then be drawn up that relates to the collection of information about innovations that are specificially effective when used with certain minority populations, while a second project is drafted to generate funds for a clearinghouse initiative that focuses on competency based instructional innovations.

Foundations are sometimes quite supportive of joint funding projects, for if designed properly, these projects can provide "more bang for the buck" than single isolated projects. The foundation can not only take direct credit for the component of the project that it funded, but also indirect credit for the component another foundation funded. It is still imperative, however, that the college itself put up a substantial proportion of the funds. Foundations are skeptical about accepting funds from another foundation in lieu of solid institutional support, unless, as noted above, the college has established and can document a solid track record of consistently receiving external funds and of using these funds very effectively.

Specifically with reference to the courtship of a foundation that has been selected for fund-solicitation, two general principles are applicable: (1) involve the foundation staff early on in the formulation of the proposal, but do not expect the staff to generate project ideas or write the proposal for you, and (2) get to know and work with the foundation staff in contexts other than just the submission and review of proposals. Both of these principles will be described in somewhat greater detail.

Perhaps the most widely accepted piece of advice for the courtship of foundation executives--particularly from private foundations--relates to their active involvement in the formulation of a project. To the extent that a foundation executive (like any other person) feels that he/she has been involved in the formulation of a project, then he/she is likely to feel some ownership for it, and will support its funding. This advice is certainly warranted, yet can be taken to too great an extreme. Very few foundation executives enjoy writing a proposal for a grantsman, or helping a grantsman clarify his/her purposes in preparing and submitting a proposal. An effective grantsman will present several well-formulated ideas to a foundation executive. Each idea will be directly related to the major theme, problem or need on which the grantsman (and his/her institution) has decided to focus. The foundation executive (by phone, letter or in-person) should be presented with these alternatives, asked to comment on each, and given an opportunity to suggest entirely different approaches.

A grantsman should not hesitate to question or even challenge the foundation executive's observations and suggestions. Most of these people are tired of "yes men" and appreciate vigorous and articulate interaction with people who expand and clarify their own perspectives. A grantsman, on the other hand, should not use this preliminary meeting as an occasion to argue for a specific alternative. Each option that is presented should be viable. If only one idea is really considered by the grantsman, then the foundation executive is likely to feel "hussled" and may view the meeting as a waste of time.

In a governmental foundation, a staff member is usually not allowed to comment on the desirability of a proposal before it is formally submitted. He/she can comment, however, on the appropriateness of the proposal with reference to funding guidelines and priorities. A governmental foundation executive also can sometimes comment on the "policies" of the review process--what type of reviewers will be employed and how they are inclined to judge proposals. The first draft of a proposal can often be read by a governmental foundation executive, if given to him/her during a slack period (between the time of proposal review and new proposal submission). The preliminary proposal will be read as background to more precisely and accurately advise the grantsman about its appropriateness.

A somewhat less desirable state also affords the governmental staff representative an opportunity to comment on the proposal. If the proposal is not funded, then the person submitting it can request copies of the reviewers' comments, and can discuss the proposal with a representative of the funding agency. Generally, these comments must be requested in writing, for they are rarely sent out automatically. Even though most governmental foundation executives are supportive of the act which requires them to release information on request, they do not have a sufficiently large staff to automatically assist the writers of rejected proposals.

It is essential that the "post-mortem" review of a rejected proposal not be viewed as an occasion for the grantsman to argue his/her case with the foundation staff. The decisions have already been made; therefore, an adversarial attitude can only hurt the grantsman in terms of future contacts with the foundation. The grantsman should approach this review as a receptive, yet selective, learner.

For the private foundation executive, a second review of a proposal before it is submitted is often acceptable and even appreciated. The proposal should be fully prepared, in draft form, and submitted to the executive for his/her comments and suggestions. The foundation executive usually will be able to indicate whether or not this proposal is worth formally submitting and will make general suggestions concerning its improvement (even if it is not appropriate to his/her foundation). The executive's comments should be taken seriously by the grantsman for several reasons. First, the executive has had a great deal of experience in reading and judging proposals, and in witnessing the foundation board's deliberations over proposals. Second, the executive's comments often reflect the subtle, yet important, changes that are occuring day to day in the attitudes of the foundation executives and board members. A suggestion to emphasize one section of a professional development proposal on career planning, for instance, may reflect a newly emerging interest of some members of the foundation about career development.

The final proposal usually should not include a formal recognition of the contribution made by the foundation executive. Informal recognition, however, is possible through the incorporation and highlighting of specific terms or concepts that have been suggested by the executive. Even if no one else is aware of his/her contribution, the executive, upon reading the proposal, will be aware and appreciative of this informal recognition.

An informal model of courtship may be just as important in seeking funds for a proposal. Especially in the case of governmental foundation executives who can not get actively involved in the proposal preparation process, it is often highly desirable to get to know and work with foundation executives in a context other than the preparation and submission of a proposal. This second form of courtship requires a much longer term perspective on grantsmanship, for the benefit of this activity may not accrue for several years. Furthermore this second form of courtship must be supplemented -- and even superseded -- by a genuine interest in the foundation executive as a person and fellow professional rather than just a source of money.

There are at least three different ways in which this more indirect mode of courtship can take place. First, one can invite a foundation executive to participate in an on-campus activity as a resource person. Many foundation executives are excellent speakers, consultants or trainers. Their breadth of knowledge in a variety of areas is often exceptional, yet they rarely are called on to share this expertise outside the foundation. Foundation executives can even be brought in to conduct workshops on grantsmanship--often provided that the participants in the workshop agree not to submit proposals to this specific foundation for one or two years.

Given that foundation executives are often involved in on-site evaluations of their own projects, these people also can be excellent evaluators of on-campus projects that have been funded by other sources. Many active foundation executives find it refreshing and illuminating to observe and assess a project in which they have no immediate investment. If a grantsman is involved in consultation himself/herself, a foundation executive might be asked periodically to serve as a co-consultant (for free or for a fee, depending on the policies of the foundation).

Second, a foundation executive can be indirectly courted by asking his/her advice about other foundations and about proposals that will be submitted elsewhere. While the foundation executive should not be expected to spend a great deal of time in giving advice on activities outside his/her immediate area of concern, most of these people are very knowledgeable about other foundations and are complimented by a request for access to this knowledge. Once again one is relating to the foundation executive not just as a person with money, but as a person with knowledge and expertise. Rarely will a foundation executive be offended by the acknowledgement and use of these latter resources.

Third, the indirect courtship can be made more successful by simply spending some time talking to foundation executives about concerns other than just those involved in the submission and review of proposals. It is often profitable to become aware of a foundation executive's academic background and interests before joining the foundation, and to read articles and major reports written by the executive. It also does not hurt to be a resource person to the foundation executive if requested. Let him/her know about the exceptional value of a proposal that has been submitted by another agency, or of some major (but as yet unannounced) development in an area of concern for his/her foundation.

One also should be sympathetic to and supportive of the complex and often frustrating job that is performed by the foundation executive. Since this person is rarely treated as a person by those seeking funds and is rarely given a straight forward or honest response in a working relationship, he/she is inclined to feel isolated and undervalued. Productive relationships between foundation executives and grantsmen often begin with a mutual understanding of personal and professional perspectives and needs.

This essay has hopefully provided the reader with several observations and suggestions that will improve the quality of proposals that are being prepared and the relationships with foundation executives that are being established. The planning of a project does not end with submission of a proposal, nor does contact with a foundation end with the granting of funds. The quality of a proposal and of relationships with foundation executives determines not only the acquisition of funds for a project but also its ultimate success, if funded.

Part 5: Bibliography of Foundation Grant Application Guides

Part 5: Introduction

Developing grants from philanthropic organizations most often private foundations, has evolved into something of a skill and an art. Indeed, the specialty of "grantsmanship" has emerged in recent years. Most colleges and universities employ at least one expert in this field.

Contacting private foundations, developing research and development programs to match their funding priorities, and writing successful proposals is a process which does not lend itself to easy summary. Although these are basic guidelines, there are also numerous "tips" which can be useful, and enough difference among foundations' interests and procedures to make a brief, all-encompassing set of suggestions of little value to serious grant development.

In its effort to offer colleges of osteopathic medicine assistance, the following bibliography of grantsmanship guides was compiled by the project. These documents are available from the publishers, writers, local libraries, and The Foundation Center's regional collections. These guides supply detailed information including topics on grant proposal writing, maintaining productive relations with foundations, and advice on budgets. In view of the complexity of the foundation grant development process, a careful review of several of these guides is recommended. Additionally, administration and faculty involved in grants development may wish to participate in any of the numerous grantsmanship workshops which are offered periodically. Publication such as the Chronicle regularly list these workshops.

Part 5: Bibliography - Foundation Grant Application Guides

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Morrow, Dr. John C. *A Basic Guide to Proposal Development*. Silver Spring, Maryland: Business Publishers, Inc., 1975. (1101 Spring Street, P.O. Box 1067, 20910) $7.95.

Oleon, Sally J. *Grants from $oup to Nuts*. Bayside, New York: Queensborough Community College, January 1975. (Office of Grants Coordinator, Queensborough Community College, CUNY, 11364) $1.50

MacIntyre, Michael. *How to Write a Proposal*. Washington, D.C.: Education, Training, and Research Sciences Corp., 1971 (Volt Information Sciences, Inc., 1221 Avenue of the Americas, New York, New York 10036) $3.95

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Mirkin, Howard R. *The Complete Fund Raising Guide*. New York: Public Service Materials Center, 1972.

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SECTION A: SUMMARY

In summary, Parts 1-3 comprised an overview of sources of funding in the private sector for faculty development projects. Parts 4 and 5 outlined additional procedures for securing foundation support. The next section completes Unit III, and examines sources of funding at the federal level.

SECTION B: FEDERAL SUPPORT FOR FACULTY DEVELOPMENT IN COLLEGES OF OSTEOPATHIC MEDICINE

SECTION B: INTRODUCTION

Federal support for faculty development in colleges of osteopathic medicine is available to improve the training of physicians and to provide funds for biomedical research projects. The major purpose of this section is to improve your ability to obtain this support.

Federal support often provides funds to an institution for such things as staff salaries, procurement of special equipment, publication costs, computer services, travel associated with data collection, and attendance at professional or scientific meetings. The government may loan equipment or allow the investigator access to highly specialized equipment. Or the government may vest the title to equipment, usually with grant funds, in the grantee institution when agreed to by the institution and when it furthers the objectives of the agency or department involved. No matter what type of activity is involved, support is given when it contributes to meeting an agency's mission or program goals. It is important to keep this in mind when dealing with the Federal establishment. Both the osteopathic medical college and the government agency must benefit from the relationship.

In those cases where an existing government program fits a specific faculty development goal or interest, the problem of getting support is less difficult. Your primary task consists of locating symbiotic programs in the Federal Establishment, and then doing whatever is necessary to have the proposal accepted. Most of this paper is focused on that effort. In some instances, however, the government may need to recognize the need for a new program or for the expansion or reorientation of an existing program in order to capitalize on the unique capabilities that your institution or the osteopathic profession have to offer. Some ideas on accomplishing these objectives will also be discussed.

This section has been organized as a guide to the process of obtaining support for faculty development under the following headings:

Locating Support

Establishing Contact

Commitment versus Interest

Improved Proposal Preparation

Timing

Dealing with Unsuccessful Proposals

This paper does not purport to represent any official viewpoints of the Federal Government. It is, rather, an assemblage of ideas from many sources.

Locating Support

Surprisingly enough, the first task in locating Federal support for faculty development is to have a significant and well thought out project under way, or at least in mind. Only then will you have a clear idea of the type and amount of assistance you will need. Projects can be started with Federal initiative, but these projects tend to be less significant from the standpoint of long term faculty development, and such projects terminate when Federal support ends. This is not to say that this possibility for support should be ignored in selecting new projects for initiation.

Once your project is well organized, you can begin the campaign for support. If this is the first time you have sought assistance, your problem is one of locating the specific program office(s) which might have an interest in your project. One of the best places to start is the Catalog of Federal Domestic Assistance. It is a compendium of programs and assistance available to the public. The Office of Management and Budget assembles this monumental document from data supplied by nearly every executive agency and department in the Federal government. The document is sold on an annual subscription basis ($20) by the:

Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

The catalog consists of the basic manual and changes as issued for a one year period. The catalog also is available in machine readable form on magnetic tape from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. The topic file reflects all the textual material published by the Government Printing Office in the program description sections of the Catalog. In addition, a "characteristic record" is included for each NTIS program containing information extracted and coded from the textual material, for use with the accompanying documentation.

The printed form of the Catalog contains instructions on how to use the Catalog; a number of indices, including a subject and agency index; and a brief description of each program. The description includes many other things, the department and executive agency, authorization, objectives, types of assistance, eligibility requirement, application and award process, assistance considerations, cost assistance requirements, financial information, program accomplishments, regulations, guidelines and literature, information contacts and related programs.

The Catalog of Federal Domestic Assistance is not complete. For example, the Office of Naval Research and the Air Force Office of Scientific Research are

are not listed. Both agencies have in the past provided support involving some aspects of faculty development. For further information you may want to write to:

Chief of Naval Research
Office of Naval Research (ONR)
800 North Quincy Street
Arlington, VA 22217

You should request a copy of the pamphlet ONR-1 which presents an overview of ONR's current programs. Or you may wish to request a copy of the AFOSR Research Directory from:

Air Force Office of Scientific Research
Bolling Air Force Base
Washington, DC 20332

Other information is available to help you locate the appropriate agency. For example, you can get some background information about various agencies' missions and programmatic interests from the U.S. Government Organization Manual. This publication is available from:

Superintendent of Documents
Government Printing Office
Washington, D.C. 20402

Once you have identified the most likely organization to approach, you should then acquire more background information about them. You may want to review recent copies of an agency's annual report. These are usually available without cost from the agency's office of public affairs. Many agencies publish pamphlets or brochures on their programs. Agencies sometimes have lists of grant or contract awards, and such lists often reveal the current "real interests" rather than the "official interests" of the agency. A perusal of these awards will also tell you something about your competition.

You should collect organization charts and phone books of the agencies you have identified as potential sources of funds. Frequently, these are also available from the Government Printing Office. You will want to identify not only the program office but the specific individuals you will be dealing with.

The largest share of Federal support for faculty development in colleges of osteopathic medicine most likely will come from the Department of Health, Education, and Welfare. HEW is a complex department, and it is recommended that you make special efforts to locate specific offices which may have an interest in faculty development. A good first start is the Bureau of Health Manpower (BHM), Federal Center Building #2, 3700 East-West Highway, Hyattsville, MD 20782. Information on faculty development programs within BHM can be sought from:

Institutional Resources Branch
BHM
Division of Medicine
Room 4-22, FCB 2

Professional Education and Development Branch
BHM
Division of Medicine
Room 4-50, FCB 2

The National Institutes of Health have several other programs which contribute to faculty development, although they were not specifically designed to do so. It would be useful to obtain copies of the following documents from the National Institute of Health, Division of Research Grants, Westwood Building, 9000 Rockville Pike, Bethesda, MD 20014:

National Institutes of Health Guide for Grants and Contacts

National Institutes of Health Guide to Programs and Awards

If your faculty development project involves research, you may want to create a record of those Federal agencies that have supported relevant research. You can accomplish this as you undertake your background literature search. This record will give you a historical trace of Federal interest in the project area. One of the best sources of information on Federal research programs is the:

National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161

You can subscribe to their abstracting service and gain access to thousands of technical reports produced by the government each year.

If for some reason your faculty has an interest in competing for solicited proposals, you will want to read the Commerce Business Daily (CBD). This publication provides invaluable information to organizations interested in selling to or making proposals to any agency of the Federal Government. The publication is issued daily Monday through Friday and highlights selected requests for bids and proposals for civilian agency procurement actions of $10,000 or more. It also contains procurement reserved for small business, prime contracts awarded, contractors seeking subcontract assistance, and research and development leads. An annual subscription may be ordered from the Superintendent of Documents, Government Printing Office, Washington, DC 20402.

The CBD may be used in slightly different way than intended. Unless you are prepared to write proposals in a hurry, there will probably not be enough time available to obtain an agency's Request for Proposal (RFP) and put together a winning proposal. Use the CBD to locate those Agencies that award contracts in your areas of interest. Then become familiar with agency programs through the procedures already outlined. Establish contact with the program personnel and you will learn about future RFPs early enough to do a creditable job of competing for contracts. You may also ask to be placed on a Bidder's Mailing List. A Bidder's Mailing List application form is available from contracting offices throughout the Federal government. One major problem with the Commerce Business Daily is that you will probably find the signal-to-noise ratio too low. It is unlikely that there will be very many Requests for Proposals of interest to colleges of osteopathic medicine.

In submitting an unsolicited proposal, you should make sure that it will be treated as proprietary if that is your desire. Most Federal agencies treat unsolicited proposals as proprietary but nothing is more annoying than having your novel ideal turned into an open Request for Proposals. Contracting officers are under constant pressure from the private sector to insure that procurements and contracts are awarded competitively. Unsolicited proposals can result in contracts, but you must demonstrate that your organization is uniquely qualified to carry out the project.

If your efforts to locate the proper agency to submit your proposal fails, ask your local Congressman for assistance in locating the appropriate place to submit your proposal. This may not be the most efficient way to find a relevant program, but it will insure immediate attention to your proposal.

Before searching for sources for support, you should have a clear idea of the type of assistance that you hope the Federal government will provide. It might be useful to review some of the types of assistance that the government provides:

o Project Grants provide money, property, services, materials, etc., to accomplish a public purpose of support or stimulation authorized by Federal statute. The funding, for fixed or known periods, of specific projects or the delivery of specific services or products is provided without liability for damages for failure to perform. Project grants include fellowships, scholarships, research grants, training grants, traineeships, experimental and demonstration grants, evaluation grants, planning grants, technical assistance grants, and unsolicited contractual agreements. Grant agreements are used whenever no substantial involvement is anticipated between the executive agency or department and the recipient during the performance of the activity.

o Contracts are used by the Federal Government whenever the purpose is the acquisition of services or property for the direct benefit or use of the government. In the area of Federal assistance, most contracts involve research where the transmission of funds would be better handled through contracts rather than through grants. The research contract is for personal or professional services or for any service rendered by a university, college, hospital, or nonprofit research institution. The principal purpose of such contracts is to create, develop, or improve products, processes or methods for public use, or to operate programs benefiting the public. Contracts are issued following receipt of solicited or unsolicited proposals. Solicited proposals contain specific details of the product or services required. However, prospective contractors can make new ideas or novel concepts known by submitting unsolicited proposals to the agencies which buy the item or services being proposed. It is important to note that a recognition of novelty or originality does not in itself justify sole source procurement.

o Cooperative Agreements (Public Law 95-224 of February 3, 1978) provide a new mechanism for the transfer of money, property, or services to recipients in order to accomplish a public purpose of support or stimulation authorized by Federal statute. In the case of cooperative agreements it is anticipated that there will be substantial involvement between the executive agency or department and the recipient during the performance of the contemplated activity. Where cooperative agreements involve the conduct of basic or applied scientific research at nonprofit institutions of higher education, the agency has the authority to grant title to equipment or other tangible personal property (purchased with Federal funds) to the institution when such an action is in furtherance of the objectives of the executive agency. Cooperative agreements fill a large gap that has existed between grant programs and contracts. Many Federal agencies that in the past have had no interest in grant programs are now looking into cooperative agreements as a way of using the talent of institutions of higher education to help them solve problems.

o Direct Loans are available in a variety of assistance programs. These financial assistance programs lend Federal monies for a specific period of time with a reasonable expectation of repayment. Such loans may or may not require the payment of interest.

- o Guaranteed/Insured Loans are programs in which the Federal government makes an arrangement to idemnify a lender against part or all of any defaults by those responsible for repayment of loans by borrowers.

- o Insurance Programs assure the reimbursement of funds for losses sustained under specified conditions. Coverage may be provided directly by the Federal government or through private carriers.

- o Property, Facilities, and Equipment Aid involves programs which provide for the loan of, use of, or access to Federal property, facilities, or equipment.

- o Advisory Services and Counseling are available. Federal specialists consult, advise or counsel at conferences, workshops, or on a personal basis.

- o Dissemination of Technical Information involves publication and distribution of information or data of a specilized technical nature frequently through clearinghouses or libraries.

After you have digested the background information relevant to the agency and program office, you will want to establish contact with the program officials involved.

Establishing Contact

In establishing contact with personnel in the target program office, you should be aware of several points.

First, find the working level professional staff member responsible for the program of your interest. Don't bother to call the Assistance Secretary, Research Director or Agency head since they have virtually nothing to do with running of programs, or awarding of grants or contracts, even though they will have to approve them. Furthermore, Office Directors or Division Chiefs, while usually involved in some review and approval role, have little or no influence in the specific selection process. If there is any antagonism between the professionals who actually run the program and management, you may be damaging your own cause by going to the management first.

Find the professional employees who run the program and get to know them. If you can't get to Washington, invite them to visit your campus. Many of these professionals look forward to getting away from the office. It's a good way for them to become familiar with your institution's facilities, management and professional staff. If either of those alternatives is not practical, you may be able to get together with them at a professional or scientific meeting.

If you come to Washington, D.C., make definite appointments. Life is hectic in the government so it may be advisable to confirm your visit the day before your meeting. Come prepared for about an hour's conversation. You don't need to prepare an elaborate formal briefing, but your thoughts should be organized. If you bring charts, briefcase size will suffice. Bring along extra copies of your material in case others in the office want to participate in the discussion. It would also be helpful for you to bring along spare copies of any other relevant documents which you can leave with the group.

Government administrators are most interested in getting to know the professional and scientific people involved in potentially interesting projects. You may bring along your proposal writer or local grantsman but it is not necessary. If the group is too large, you may not be able to establish rapport quickly and get across the information you need to pass on in the time available. If you must restrict the size of the group, concentrate on professionals who are associated with the project. You will want to use your initial contact period to provide the government administrator not only with background information about your specific project, but information about your institution and profession. Having the Department Chairman or Dean along on this initial visit will help. Be sure to have general background material on your institution and profession available to leave with the program office.

Don't assume that the government administrator is omniscient or stupid. You should bring the administrator up to speed as you discuss your proposed project. Don't hesitate to ask for advice. If there is interest in your project, the administrator will want to give you as much help as possible. If there is no interest, both of you will want to waste as little time as possible. During the meeting, you will want to confirm the information you've gathered from reading the catalog of Federal Domestic Assistance, agency and program brochures, etc. You need to find out if the organization has a potential interest in your proposed area of activity. Ask about the proposal processing cycle and the review process. At some point you will certainly want to ask if you should submit a proposal.

The program official is not going to be able to commit himself to anything after your first meeting. Furthermore, your proposal will probably have to be refereed, a time consuming process. However, if the government administrator offers encouragement, you should proceed with proposal preparation.

Commitment versus Interest

It has already been noted that the first task in locating Federal support is to have a good idea for a project. You will also have to demonstrate more than interest if you expect to attract Federal support. The government is deluged with proposals from organizations whose major or only interest is in obtaining funds. Most government administrators can easily spot these kinds of proposals.

There are many ways of demonstrating genuine commitment. In some cases, agencies require some form of cost sharing. However, cost sharing is only one way of showing commitment. A better method would be to plan a project in such a way that you can launch into it on your own at a low level of effort. The project might involve a phased activity so that you can get it underway without outside support. You would then be asking for funds to expand an ongoing project or for support to move it ahead faster. You may want to consider the possibility of undertaking projects involving joint commitment to a goal. In efforts of this type, the goal of the specific faculty development project for the osteopathic medical colleges would be linked with an agency interest or goal. You may be asked to commit some of your resources not only to implement your project at your institution but in some other environment as well, e.g. other institutions or in a government establishment. There are projects of such a nature that nothing is achieved until they exceed a critical size. They may be of such a magnitude that you will have to commit resources from several colleges to accomplish the goal. In such cases your problem actually is simplified. No group of colleges or a reputable association will launch a program of such a magnitude without their firm commitment to a successful outcome.

As you organize your project, you should give early thought to implementing the results and any follow-on activities. There frequently is concern about the continuation of a project once Federal support has ended. The government doesn't mind seeding projects but it will look long and hard at the requirement for an endless commitment of funds to keep them going. An example of a way to show continued commitment following the conclusion of a project might be to conduct an analysis of the data collected and to publish additional results with an acknowledgment of agency support. Keep the agency informed of the results of its efforts after the contract has ended; agency officials may remember it the next time they sponsor a project. In fact, if they were interested but didn't provide support on this project, keep them informed anyway.

There are also many ways that you can demonstrate your commitment at the start of a project. Cost sharing has been mentioned. Evidence of past performance is one of the best ways to show it. For example, you might have conducted a student or faculty seminar or workshop, brought in consultants, published a paper or prepared a report, ran a conference, developed a bibliography, etc. Perhaps you have created a master plan and had it approved by the Board of Directors of the institution, or you may have set up a teaching laboratory, conducted a survey, or even developed prototype equipment.

Be sure that you are committed to the project. Commitment sells better than interest.

Improving Proposal Preparation

Read, re-read and fully understand the application procedures before you start preparing your proposal. After you draft the proposal, read the procedures again and check the draft against them. Use the proper forms required. If you have a question, ask the agency program official.

You may save time in dealing with some agencies by preparing and submitting an informal proposal to the program office. If the program director is interested in your project, you will receive some valuable guidance on how to orient the formal proposal. Remember, an informal proposal can be converted to a formal proposal with the addition of a firm cost estimate and appropriate signatures.

In general, you should include:

- The legal name and address of your organization as well as the name of the principal investigator and the individual authorized to approve the proposal for the institution submitting the proposal. Be sure to indicate the educational nature of your institution.

- Name and telephone numbers of personnel involved. Include key administrative as well as professional personnel.
- Desired starting period of the project, remembering that it takes time to translate a proposal into a grant, contract or cooperative agreement. Include the time period for which the support is requested.
- A curriculum vitae with a list of publications for each professional participant in the project. Under no circumstances should you include "proposals submitted" in your list. You may include citations to technical reports.
- Detailed and comprehensive cost estimates.
- Proper signatures and authorizations.
- All copies requested. If the number is not specified, submit two copies.
- An appropriate title. Be extremely careful in picking your title unless you want to win one of Senator Proxmire's Golden Fleece Awards.
- An abstract or brief summary of your project on a separate page.
- A detailed description of the work to be undertaken, methods to be used, work objectives and their relation to the state of knowledge in the field and to comparable work in progress elsewhere. The description of the proposed project should reflect the work of the professional. It is not critical that the proposal be perfect from the asthetic point of view. What is important is the uniqueness, soundness, and value of the project, and the fact that competent people

are available to carry it out successfully.

- A statement of why you are carrying out the project, why the project is needed and why the prospective sponsor should provide support. The proposal should fully outline the benefits to be derived from the project and the methods for broad implementation if required.
- A statement of experimental or theoretical methods to be used if the project involves research and a bibliography of pertinent literature citations. You don't want to reinvent the wheel and the agency wants new ideas and innovation.
- Any special support the institution needs from the agency, e.g. facilities, equipment, materials or personal resources.
- A discussion of activities involving the use of human subjects, if appropriate. If animals are involved, include the rationale for using the animal species involved, procedures to be used, and a discussion of pain causation, control or prevention.

Avoid words or phrases with possible sexual connotations - Single, double, or triple ententres, or words with a vulgar meaning at variance with the scientific meaning. Be precise. Avoid vague and inexact usage. Avoid idle words. Spell things out. Avoid acronyms and peculiar abbreviations. Be clear. In summary, keep your eye on the ball. If the word, sentence or paragraph doesn't contribute to your purpose, leave it out.

After the proposal is typed, proof-read, assembled, bound, proof-read again, then and only then, mail in the required number of copies. In a short time you should get an acknowledgment that the proposal has been received. If you have not heard from the agency after a reasonable period of time, ask your secretary to check with the secretary at the program office of the Federal Agency to make sure that the proposals were not lost in the mail. You may wish to enclose a self-addressed postcard of acknowledgment.

You may submit the proposal to several different agencies, but be sure to tell the program administrators that you have done so. There is coordination among Federal agencies but it is not foolproof. It may be possible to obtain joint funding for a major project from several Federal sources but this is at best a difficult and uncertain process. The risk here is that one agency's refusal to provide support could jeopardize the whole project. On the other hand, if you should succeed, such projects tend to be supported for a long time. A better idea might be to obtain foundation or other support as seed money, with Federal support paying for the major part of the project. Furthermore, foundation support increases your credibility with review groups.

If you are successful and your project is approved you should move quickly to get underway.

Timing

Be sure that you meet all deadlines set by the executive agency and the program office. If there are no established deadlines, you should be aware of a potential problem that results from the Federal Fiscal Year. The Federal Fiscal Year starts on the first of October while Congress does not always get around to appropriating funds until much later. On the other hand, the agency contracting offices want the program offices to commit all of their funds in that same fiscal year usually by the first of June or July. This is to allow time for processing the contracts. So while some agencies may accept proposals at any time, most awards for contracts are made from January through June. Proposals that lie fallow too long tend to be rejected. Get to know the processing cycle of the agency; it can be used to your advantage. Many agencies are not bound by fiscal year restrictions and can carry over funds from one fiscal year to the next. This helps to alleviate the problem of properly timing your proposal. However, the Office of Management and Budget (OMB) takes a dim view of any agency that carries over too much of its appropriations, and the agency may find its budget reduced by OMB or Congress if this happens too often.

Another aspect of timing is worthy of consideration. The government is constantly responding to pressures from many different sources. Programs for faculty development may rise or fall as a result of pressures from many different sources (e.g. Sputnik, Civil Rights Movement). However, do not conclude after looking into some of the obvious sources of Federal funding that the time is not ripe to pursue a particular program. If you have a first class idea, explore that idea with appropriate program offices. It may just be the very concept they need to reactivate a program that has been relatively dormant. In some cases program offices in an agency may be able to steer you to an organization with an active interest in a program.

If you want to keep up with the official regulation changes that are constantly taking place in the executive agencies, you should monitor the Federal Register. This publication contains official notices of all rules and regulations promulgated by the Executive Branch of the Federal Government. It is available on a subscription basis from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402. The GPO also has a volume "The Federal Register - What It is and How To Use It", which is a guide for users of the Federal Register. Don't waste the time of your faculty or professional staff members in monitoring this publication. Use your administrative, legal, or financial staff to keep your institution informed about new programs, new regulations, or changes in old regulations.

Federal policy on short term versus long term benefits is something that you must also be aware of in dealing with some government agencies. During the past ten years, the pendulum has swung towards support of programs with short term payoffs, although that trend may reverse in the near future. Payoff refers here to the benefit derived from your project towards meeting the objective of an agency. You may want to keep this issue in mind when preparing a proposal.

Dealing with Unsuccessful Proposals

It would be most unusual if each proposal you submitted resulted in a grant or contract. Most institutions or faculty members receive rejections sooner or later. Don't be discouraged if your proposal fails. There are several things you can do which may help you learn from this experience.

First, find out why the proposal failed. Did you send it to the wrong agency? Where funds not available? Was it poorly prepared? You can contact the program officers and ask them for their comments. Don't haggle, cajole or intimidate. Don't argue with them about the decision. The Freedom of Information Act is available and if necessary you can use it to obtain the comments of reviewers with respect to the proposal. You will be astonished at how normally intelligent professional people can misinterpret a simple statement. If this was a problem, you will have to use greater care in preparing the next proposal.

If the review panel meets as a group to rank all proposals, you will probably not be able to gain access to their comments. You may get some feedback from the program officer, but they will want to protect their reviewers. You may want to establish your own institution or association review panel to identify potential problem areas in advance of formal submission of proposals. Furthermore, you may want to encourage faculty member participation as proposal reviewers for Federal agencies. The experience could be most valuable.

It would also be helpful if you could discover the identity of the successful grantees or contractors. What did they have to offer that you failed to consider in the proposal?: Was it better staffing? Did their proposal have greater payoff? Will the results of their project solve your problem?

If a competitive contract was involved you may ask for a bidders' debriefing. You may also ask for abstracts of all the bids as part of your debriefing.

After you feel that you have gathered as much feedback as possible or practical, you will want to consider some of the alternatives available.

Should you simply rehash the proposal and resubmit it to the same agency at a later date? Such a practice is not recommended. Program directors have good memories. If you receive encouragement from the program officer or you have come up with a promising breakthrough since submitting the proposal then resubmit. If nothing significant has happened, you should probably reorient the proposal and seek out another agency for support.

You might chop your project into smaller chunks of activities and use the piecemeal approach. Conversely, you may need to aggregate several inadequate chunks into one significant project. Not every project can be subdivided into meaningful work units and sometimes smaller funding jeopardizes the chances for achieving a larger goal. However, it is possible that with smaller funding or funding for a part of the project you will learn enough to find a better way of achieving your goal. This new insight could lead to the development of a stronger proposal later for the remaining tasks.

In some cases, the project may have to be set aside. Perhaps the time was not appropriate, or funds were not available. In the meantime you should look for new approaches or better methods to accomplish the project goals. You might look for other faculty members to work with you if that can be arranged.

Perhaps there is no agency with a program for your project. If you find there is no home for your project, you may want to consider the possibility of asking a Federal agency to initiate a new program or expand or reorient an existing program. Such a task will usually be well beyond the resources and capabilities of an individual faculty member unless he is exceptionally well known, highly respected throughout the professional community or well connected in the Washington establishment. The task will most likely involve not only your department as well as your institution, but a number of colleges of osteopathic medicine or your association acting as a corsortium. Furthermore, this approach takes a long time to get a program launched.

Your first task will be to outline the need for and importance of a program to accomplish the goals of your individual project on a much broader basis. This is the area where your institution's Department Chairmen and Deans can assist you. If the program is important for the future development of osteopathic medicine, you're at least half way home.

The next step involves contacting the appropriate agencies at the highest levels to discuss the need for your proposed program, the benefits to be derived from it, the type of assistance required, legislative problems, if any, and assistance that the institution or association might offer in setting up the program. Such assistance might include the establishment of an advisory panel, provision of consultants, and the use of various media (e.g. UPDATE) for promoting the program.

When you're establishing contacts for a new program, you will want to use your higher level administrators to make the problem known and understood. You want to avoid the appearance of any conflict of interest. Your institution's goal is to work with the Federal establishment in initiating a new program to solve a problem of national importance. Once the program is established, you will send in your professional and scientific staff to implement the program and in the process obtain the support required.

If your program will effect a change in any agency's budget, you should realize that budget modifications may require eighteen months to two years to implement. The FY 1980 budgets in many agencies were developed in early FY 1978. If you add to this the time required to set up the program in the agency, you may face a three or four year period before your original project will actually be initiated. Thus, it may be faster and simpler to look for a program in a Federal agency that can be expanded or reoriented to include the type of projects you are proposing. If your efforts are successful you could cut the time lag to a few months.

Section B Summary

- Federal support is available for faculty development in colleges of osteopathic medicine.

- Both the osteopathic medical college and the government agencies involved must benefit from participation in the relationship.

- The first task is to have a significant well thought out project in mind or underway.

- Use the resources available to assist in locating potential sources of Federal funding or other types of assistance required.

- Establish contact with the working level professional staff members in the government agency responsible for the program of your interest.

- Be sure you're committed to your project. Commitment sells better than interest.

- Read the application procedures before starting to prepare your proposal.

- Write a clear, concise and professional proposal.

- Meet all required deadlines.

- Get to know the processing cycle of the agency and avoid potential timing problems.

- Submit an informal proposal if that is recommended.

- If your proposal is rejected, find out why it failed.

- Encourage faculty members to participate as reviewers for Federal agencies.

- Do what you can to salvage rejected proposals through reorientation, looking elsewhere for support, strengthening the concept or staff or developing new methodological approaches.

- If necessary, consider the establishment of new programs within government or the reorientation or expansion of existing programs.

VOLUME III SUMMARY

In summary, VOLUME III comprised the resource and guidance materials to be used with VOLUMES I and II by the colleges of osteopathic medicine as they engage in faculty development programs. UNIT I reviewed the existing literature in faculty development models, processes, and program evaluations used in general higher education and in medical education. UNIT II identified the faculty development experts by specialty and by type of institutional experience. Finally, UNIT III assessed sources of funding for conducting faculty development projects in both the private and public sectors and provided information about procedures for receiving such support.